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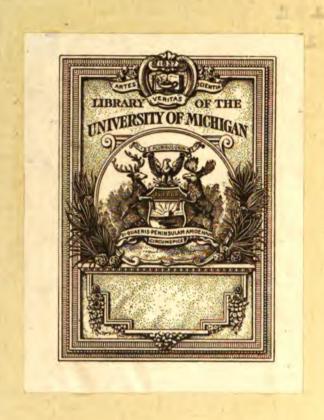
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## THE

# SOUTHERN PRACTITIONER

AN INDEPENDENT MONTHLY JOURNAL

# Devoted to Medicine and Surgery

NASHVILLE, TENNESSEE:

DEERING J. ROBERTS, M. D.

Late Professor of Principles and Practice of Medicine in the Medical Department of the University of the South, Late Professor of the Theory and Practice of Medicine in the Medical Department of the University of Tennessee

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# **Original Communications.**

#### THE SOCIAL CANKERS.\*

BY OTEY J. PORTER, M.D., OF COLUMBIA, TENN.

In the warfare between science and ignorance it is necessary for science to expose some of her soldiers to the extra hazard of the skirmish line.

The physician who ventures to publicly discuss the relation of venereal disease to social welfare must forego the hope of popular approval and become an adept at dodging verbal brickbats. He must take chances as to whether he

<sup>\*</sup>Annual address of the President of the Middle Tennessee Medical Association, delivered at Murfreesboro, Tenn., November 19, 1914.

will be esteemed a Paul Revere risking his neck to warn the people or an Arnold meriting professional death. Certain it is he is on the skirmish line, a shining target for the slings and arrows of outraged prudery.

Whether a given achievement is held in after time to have been traitorous or heroic depends usually on which side won. Had the war of independence failed Washington's memory would now probably be execrated rather than venerated. In the contest today being waged between science and the social evil the latter has, because of its alliance with popular prejudices, thus far signally won.

Did I not hope for the final triumph of knowledge over ignorance I would not now be so foolhardy as to invite the odium incident to discussing this tabooed theme.

In my judgment, science is today playing against popular ignorance, for the heaviest stakes possible — namely, the health and happiness of a nation. If science wins, the last and the greatest of the disease afflictions of humanity will have been overcome. If ignorance wins, it will do what ignorance triumphant has ever done—crucify the truth and continue to doom countless human lives to living deaths. Is the game not worth the candle?

The two venereal diseases that concern public health are gonorrhoea and syphilis. They are due to germs that are as well known to physicians as dog fennel and Johnson grass are known to farmers. Both infect the entire body. Gonorrhoea, however, attacks chiefly the reproductive organs, leaving in its wake a host of chronic, incurable conditions, not the least of which is sterility.

Syphilis plays no favorites with the organs and tissues of the body. It paints the skin every hue of the rainbow; it enters the mouth and leaves it a charnel house; it bestrides the face and makes a saddle of the nose; it leaps on the scalp and snatching here and there brings sad wreckage to woman's crowning glory; it touches the sparkling eye of youth and leaves a stupid stare in lieu; it plays with the mechanism of the brain and turns a brilliant man into

a simpering idiot. In short, when its work is well done, there is indeed little left but "a rag and a bone and a hank of hair."

The gravity of any disease in its relation to public health depends upon its degree of prevalence, the facility of its transmission, its morbidity and mortality and the possibility of its prevention and cure.

I will not weary you with statistical details bearing on the prevalence at the present time of venereal disease. The few figures given are the most conservative to be found. I know that these diseases are more prevalent than my figures indicate; but as no cause is helped by exaggeration we will not run the risk of over-statement.

You may take it as certain that 90 per cent of prostitutes are infected with, and capable all the time of transmitting either one or both of the venereal diseases; that 60 per cent of men have or have had venereal disease; that 20 per cent of married women become infected after marriage; that a large number of children acquire these disease by contact with their elders and by inheritance.

With regard to the transmissility of these diseases, all that society needs to know now is that they are highly infectious, and are often acquired as innocently as measles.

That syphilis happens to be classed as a venereal disease is merely an accident of its law of transmission, for the germ will take hold and flourish quite as viciously on the rosy lips of the purest girls or on a physician's finger as elsewhere.

If the virus of syphilis is lodged anywhere on the human body where the scarf skin is broken, systemic infection follows. It may be, and indeed frequently is, acquired by kissing. In a Pennsylvania town inhabited chiefly by Hungarian miners, an annual Christmas carnival occurs during which the usual social restraints are, for an evening dance, suspended. Last Christmas, during the progress of this dance, interludes were a feature, during which any man was at liberty to catch and kiss every girl he could. One

male dancer, whose mouth and lips were loaded with virus, conveyed syphilis to the lips of nine healthy girls.

Every physician of experience has seen more or less of these peculiarly tragic cases of acquired infection.

Syphilis is the mocking bird of diseases. It can scarcely be said to have a note all its own, but screeches out its tragic story in every pathologic key, now simulating one malady, now another.

But this mimic of all diseases has at last been run to ground by the genius of Wassermann and Noguchi, so that today locomotor-ataxia, general paresis and numerous other heretofore lost snatches from the opera syphilitica tragica have been recovered and their score and libretto completed.

In regard to the effects of venereal diseases on the individual I confess to a state of perennial astonishment at the unbelieving attitude of the public touching their seriousness. That they are two of the most deadly and widespread scourges that afflict mankind is beyond question. Over half the women who go on the operating table for abdominal dissection are put there by gonorrhoea. For every one brought to operation there are many chronic invalids, made such from the same disease. These spend their painful, weary lives wondering why Providence has so afflicted them. One-fourth of all blind children suffer the loss of sight as a consequence of eye infection by venereal virus at their birth.

When not less than 60 per cent of all men acquire venereal disease during youth and early manhood, when it is known by all competent physicians that a large per cent of these men remain capable for years of transmitting infection, when so large a number of married women bear evidence of past or present infection, when almost every town and hamlet has a family exhibit of its ravages, does it not seem surprising that society so long delays taking up adequate defensive measures?

We will now consider the effects of venereal diseases on society. In the last analysis this phase of the question con-

cerning itself with the family and the individual. Now, venereal disease bears about the same relation to the family and the social organization founded thereon as a worm bears to an apple. Like a canker it eats at the very core of successful marriage. Of the marriages prevented (and alas! but one is prevented where ten should be), of the innumerable instances of anguish for the present, apprehension for the future and remorse for the past that have their cause in the havoc of venereal disease on the lives, happiness, and health of parent and offspring, no tongue can tell, no pen describe. To the extent that it tends to thwart the purpose of marriage, to destroy or cripple the family, to that extent does it sap the state.

The motive of patriotism alone should urge an active warfare on this powerful enemy of society.

Disease manifestations, whose causes until lately have been unknown, have recently been proven to be due to the germ of syphilis introduced into the body twenty, thirty, or even fifty or more years ago. Every now and then physicians are called to treat some obscure brain disease in a person whose life for years has been on a plane apparently above the possibility of venereal infection. The blood tests and treatment frequently prove the cause to have been syphilis.

For a long period the profession has believed that the germ of this disease was transmissible from parent to offspring no further than one generation. Recent studies show that it is highly probable that the germs may be passed on to the third generation. A paper by H. F. Stoll, in the journal of the American Medical Association, in the October 31, 1914, issue, is instructive along this line. From thirty-two families whose parents, one or both were known to have had acquired syphilis, sixty-eight children were tested for evidence of hereditary infection. Forty gave positive reactions. Six grandchildren were tested with three positive reactions.

A person whose primary infection was so trivial as to pass unnoticed or be forgotten, enjoys good health for many years, when without apparent cause he becomes epileptic or begins to have grandiose ideals, or finds his ability to walk impaired, or suffers lightning-like pains throughout his body. What has happened to so deeply disturb the smooth current of his life? This! The treacherous germ of syphilis, ignorantly admitted to his body years and years ago, has begun to stir. With a countless host of his progeny he assaults the storehouse of our nerve energy and lets it run riot in epileptic convulsions. Or stealing along—

"The myriad chambers of the brain
Where thoughts are linked by many a hidden chain;
He cleaves the links and lo! What wreckage flows.
Where once was mind, an insane furnace glows."

Or, perchance he opens an attack on the substations of the brain that preside over our half-conscious acts, such as walking, talking, etc. We begin to take note that our feet are behaving curiously. The enemy has garrisoned his pallid army in the little gray villages scattered up and down the spinal cord highway that connects our brain and body. We start an order to our feet to move forward, but our lines of communication are in the hands of the enemy, the order is garbled, the leg misunderstands and sidesteps. Or the enemy trains his artillery on the citadel of the body, the stomach, and this brave stronghold collapses in quivering agony; fiery darts leave their burning trail in every limb; where health and peace so lately reigned in this republic of our body, anarchy is let loose; the sewers of the system become choked and we become the veritable gravevard of our former selves.

If the individual alone paid the price of his misadventures, it would be hard though just. But natural law is inexorable and cruel and visits the infection of the father upon the children even unto the third and to the fourth generation.

I firmly believe that the profession has merely glimpsed the far-reaching effects of hereditary syphilis. Many obscure disease manifestations, the cause of which are now unknown, will be found to be due to disturbances, the consequence of hereditary syphilis.

We have discussed the nature and effects of venereal diseases. What are we as a people doing to check their spread? Nothing! May be worse than nothing!

Two principal methods of attacking them have from time to time been urged and tried. The one is moral culture, the other legal force.

Moral culture finds the larger number of supporters. It is based on the dogma of divine retribution for sexual sin and sees in suffering a just punishment. It contents itself with pointing out the penalties here and hereafter. It concerns itself with the customs and morals of humanity and is forever calling attention to the dance, the dress, the manners and the speech of society as a factor in the spread of venereal disease. It seeks to suppress venereal disease by suppressing the manifestations of sex. This plan is indictable on two counts. First, it ignores what is self-evident on every hand, that moral restraint operates ineffectually in the presence of passion and opportunity. Secondly, if it ever had any merit in more God-fearing periods of our past history, it certainly is a failure now.

Legal force in one form or another has been, and is now in some States being, tried out. Segregation of prostitutes with medical and police surveillance has been the favorite mode of invoking the aid of law. This plan has been thoroughly tried in a number of European countries and in Cincinnati in our own country. It has completely failed, as so unscientific and so senseless a plan deserved to fail. Suppose that plague and cholera lasted its victims for years. What sense would there be in trying to limit their spread by segregating some of the infected to one quarter of town and allowing the other three or four-quarters to

visit them ad libitum? Wisconsin has a new law which requires a certificate of freedom from venereal disease as a condition of marriage. This law in its effect is rather punitive than preventative. It is possibly worth while to have some such legal recognition of the social canker in its relation to marriage, if for no other reason than its publicity value. However, there is to be said that all legal restraints to marriage, if not circumvented, as they usually are, tend to increase licentiousness and hence to become self-nugatory.

The only sensible way to cope with this growing menace to society is to look on the so-called venereal diseases in exactly the same dispassionate, scientific spirit as we look on any and all other communicable diseases. We must disassociate the problem of preventing them entirely from the question of sex morality. The latter is a spiritual question, the former a purely material matter.

To what conclusion do we arrive?

First, that venereal diseases should be made reportable. To secure the enforcement of such a law now would be difficult for the reason that infected voters and many physicians hold that the privilege of individual secrecy is more sacred than the rights of the public. In a well ordered state the individual should have no privilege at variance with public welfare. While this feature of a successful plan is desirable it is not essential and I doubt if it is at present practicable. Second, let the extent and the consequences of venereal disease be made as familiarly known to the public as they are known to physicians. This could best be done by medical organizations, which should cause to be published and republished in the public press authoritative statements concerning these diseases, their cause, their communicability and their grave effects. Third, and by far the most important feature of our plan is to supply adequate personal instruction as to the means and measures that will prevent infection where the possibility of

infection may exist. This proposal is the pons assinorum in the geometry of venereal problems. Instantly popular and professional objection arises. This plan indeed proposes to cross the Rubicon that lands us in a purely materialistic relation to the problem of venereal disease. Well, so be it. It is certain that so long as we are dominated by the moral aspect of this vital question, just so long will this curse of the ages hang on the neck of society, a veritable old man of the sea.

Can we cure yellow fever or smallpox? No. But we do prevent them until no longer do they scourge mankind.

Suppose that the problem of preventing these diseases had been entangled with a moral question, so as to practically thwart successful preventative measures? Where would the world be today?

To contend that to teach the means of personal protection is to promote immorality is beside the mark. Each human being is alone answerable for his own morals. Besides, the moral quality of an act is not altered by the accident of escaping or acquiring disease.

If we ever make any progress whatever in the way of lowering the rising tide of these diseases, then we will have to lay aside prejudice and apply the scientific principles of prevention that have been so eminently successful in ending all the other great plagues that have afflicted mankind.

We, as physicians, know this to be the bald, repugnant truth, but the truth nevertheless. Through moral cowardice and the shocking ignorance of the public we have thus far done practically nothing to effectively stay the march of two perfectly well understood and preventable diseases, which, taken together, cause more physical suffering, more mental anguish and more race degeneration in these United States of ours than any other dozen causes, alcohol excepted. I would not be understood as intending to make the way of the transgressor easier; but I would be understood as offering the only real effective protection to the

transgressor's family present or prospective. Every other method of controlling these diseases has been tried and found wanting. Instructions as to personal protection has heretofore been rejected as inconsistent with sound morality and as beneath the offices of self-respecting physicians. The ground of both these objections is untenable. Must we see our daughters and grandchildren syphilized in order that a prospective son-in-law be punished for his transgressions!

The notion that it is beneath professional dignity to prescribe means of personal protection against venereal disease, that to do so is to enter into a compact with the desire to promote vice, is as unscientific as it is inconsistent. If we propose to refuse to prescribe means of prevention, let us consistently refuse to interfere with divine vengeance and withhold all curative measures.

Which is the more humane, to allow a man to fall into a hidden ditch and then help to fish him out, bruised and battered and maimed for life, or to warn him of the hidden danger in his pathway and to tell him how to avoid it? To sum up the matter in a word: Our moral obligation to protect society by any means whatsoever from disease transcends all petty considerations of professional dignity, or the negative power to permit vice to punish its votaries.

If any person will study the results of all the crusades against venereal disease from the remote past to the near present, he will discover that all attempts save one have served to increase rather than diminish their prevalence. The one exception is the method introduced into the United States navy several years ago. Since then the diminution of venereal diseases in the navy has been remarkable. The method is highly interesting as being the only measure that has ever had the slightest obvious effect in lessening these diseases. The plan consists solely in personal protection.

Mankind is forever bemoaning his fall from Eden, his descent from divinity. Far more profitable would it be for

him to realize his ascent from animalism. For only by a true appreciation of our place in nature can we evaluate all the factors that enter into the complex subject of sex relationship.

Carlyle defined man as an animal surrounded by clothes, and civilization as veneered savagery. These half truths lie close to the root of the social evil. Moralists have conceived an ideal of sex relationship which, however beautiful and perfect in theory, is at war with an instinctive tendency that reaches back into the dim period of our anthropoid origin.

Because humanity in the matter of sex relationship falls short of a lofty ideal, must humanity be scourged with these hellish diseases? I say from the bottom of my heart, No! The day that marks our conquest of venereal disease will mark a new birth for idealism. How and why would here carry us too far afield. Suffice it to say that venereal disease is doing more today to make marriage ofttimes a miserable failure than any other single factor that may operate in that direction.

I would not end this paper and omit to pay a tribute to the force inherent in human nature that makes for righteousness. The very burden it has imposed on the scientific management of venereal diseases is, in itself, a testimony of its existence and power. But this force is here misdirected and is always misdirected when it interferes with public health measures.

Let us all recognize, what no sane man can question, that the highest interests of the race are best served by continual sacrifice at the altar of chastity; and that the moral salvation of mankind, as regards this matter, lies in keeping within the law. But, let me emphasize, there is no inconsistency between preaching idealism with reference to sex relationship and teaching personal prophylaxis with reference to venereal disease.

## Selected Articles

## BACTERIAL BY-PRODUCTS AND THEIR THERA-PEUTIC USES.\*

BY RALPH WALDO HOLBROOK, M.D., KANSAS CITY, MO.
Superintendent South Side Hospital; Lecturer on Diseases of the
Chest, South Side Hospital.

In selecting a subject that would interest the members of this society, I naturally considered the one uppermost in the minds of the internist and one of the most prominent in medical literature today. With the enthusiasm, the opposition, the good and indifferent results, the lack of standardized and tried products, the claims of some producers and their gross lack of experience, plus the growing demand, and also because I believe this to be the ultimate treatment for all infections, enough cannot be written from actual personal experience.

In justice to some producers, let me say that their products are sent to various parts of the country, accompanied by all the theoretical information possible to be gained from their laboratories, together with a statement of the experiences of men in actual practice. If a majority of adverse reports come in, the product is discarded. This oftentimes means thousands of dollars expended and no returns.

This paper is given to you after four years of experimental and private application of the bacterial by-products. By the term "bacterial by-products" I mean vaccines, serums, and filtrates. Bacterial vaccines are suspensions, in a preservative or physiological salt solution, of killed pathogenic bacteria. This product is sterilized and standardized to contain a given number of bacteria to each cubic centimeter. The therapeutic action is dependent upon a stimulating action on the body cells, thereby producing

<sup>\*</sup>Read before the Bates County Medical Society, September 24, 1914.



antibodies—i. e., agglutinins, bacteriolysins, opsonins, precipitins, and other anti-bacterial substances.

A serum is a fluid containing antibodies already formed. It is injected subcutaneously and does not stimulate the body cells, consequently the immunity is not of as long duration as that established by a vaccine.

Every few days I receive letters and telephone messages from doctors who have had indifferent results, also from those who have had good results in one case and in a second seemingly similar case have had no results. The majority have followed too closely the accompanying printed matter and have not used their good judgment, which would give them results with varied doses of the drug. In talking to a bacteriologist of one of the leading producing firms, he remarked that a good many failures could be traced to, first, faulty diagnosis; second, a lack of experimental dosing.

Gentlemen, we, as physicians, have been grossly negligent in diagnosis. We have all had our cases of painful points, periodically sore joints, and acute multiple arthritis following a tonsillitis epidemic. We have given enough of the salicylates to derange the stomachs of the whole community. We have had gastric hyperacidity and used bismuth and carminatives and have not tried to locate the infection, which is usually streptococcic in the first instance, and an intestinal infection in the second. We have had patients who have had endless complaints. By looking for and locating the causative infection, we might have saved a social menace and made adherents to modern medicine instead of supplying recruits for the different "isms."

The following ideas, cases, and conclusions are all the result of personal experience, as I have purposely avoided all reference to theory; for I believe we get our best information from the actual results of others. When bacterial by-products were first given us, and even now, a physician must individualize each case and adapt the dosage thereto.

Following indifferent results two years ago, I found that

the fault in some cases must be laid to the virulence of the product; and, as stock by-products must necessarily be standardized, I would have to meet those cases with an autogenous vaccine. The virulence, I believe, can be established by the number of cocci in a chain, and that, when in certain cases the results come to a standstill, then a second autogenous vaccine will give you a complete cure. In proof of this idea, I offer the following case:

A lady 49 years of age was referred to me by Dr. M., from a nearby town. She had had scarlet fever thirty-two years ago with a resulting chronic otitis media. Irrigation by a number of aurists had given no results. I made an autogenous vaccine, which eliminated the green color of the pus caused by the bacillus pyocyaneus, but that did not control the discharge completely. I made a second vaccine, which entirely stopped it.

We know now, since Dr. Rosenow's article was published about eighteen months ago, that the same pathogenic bacteria may be transmitted from one patient to another, and give evidence of a different affection, with an increased or decreased virulence. I had the following interesting experience in support of this fact. In September, 1913, I was called to see a boy thirteen years of age who complained of a sore throat. Diagnosis was made of follicular tonsillitis, and I gave the usual orders and treatment. I was called out of the city and left patient in charge of an assistant. On my return, two days later, I found both ears involved and had paracentesis performed by Dr. Thomason with relief. I examined the discharge and found a Twenty-four hours later meningeal sympstreptococcus. toms appeared. I made a spinal puncture and again found streptococcus; serum was given, but the patient died twelve hours later. On the third day of this boy's illness, I was asked to see his brother eleven years of age, and found a sore throat and tender joints. He had been sick for three I aspirated the right knee, and demonstrated the streptococcus. This boy developed a septic endocarditis

and, two months later, a pericarditis with effusion. I tapped the pericardial sack and the patient obtained some relief; but four months later he died of an adhesive pericarditis and consequent nephritis.

During the funeral of the first boy the mother fainted and was taken home. I saw her later the same day and she had a facial erysipelas (streptococcic). A stock vaccine administered to these cases in prescribed doses would not have given uniform results. I could not give a vaccine for reasons unnecessary to state.

The following cases, which I have not attempted to classify, I am giving only to show results:

One year ago I reported a series of typhoid cases, twenty-two in number, treated with vaccine. These cases could not be classified as mild, local cases, as they were referred from several different states and a majority reached the hospital profoundly toxic. I gave the vaccine in some cases each day for three or four doses, then changed to one injection every fourth day. The following results were noted:

- 1. A shorter time sick.
- 2. Temperature was reduced after second injection.
- 3. The usual profoundly toxic symptoms were relieved after second injection.
  - 4. No relapse.
- 5. Virulence of organism was diminished as compared with cases not treated with vaccine.

I believe this report is the first given in the middle west, and objections were offered because of partly non-favorable results in a few cases by one of the leading eastern hospitals. But today I believe a majority of the typhoid fever in Kansas City is treated with vaccine.

The following case was of great interest to me:

A young man, 19 years old, was referred by Dr. C. for an examination of the chest. He gave the following history: Typhoid fever October, 1913; sick six weeks; gained flesh, resumed work and felt good until May, 1914, when he

suffered general malaise, loss of weight, abundant sputum, cough and afternoon temperature. I examined him on May 18, and made a number of sputa examinations, all to the tubercle bacillus negative. Finally I used a differentiating stain, and, much to my surprise, was confronted with the Klebs-Loeffler bacillus, with an accompanying saphrophyte. I gave him the diphtheritic serum, four doses totaling 5.500 units, with no results. I then made an autogenous vaccine, which caused a complete disappearance of the bacillus and the saphrophyte. This patient was a diphtheria carrier and had endangered the health of several hundred fellow-employes. The few cases reported so far have proved obstinate and the use of formalin and the actual cautery for months at a time have given indifferent results. The vaccine in this case represented the total antibacterial complement, which the antitoxin could not possess.

Dr. J., a brilliant young teacher from the University of Nebraska, consulted me last November about the possibilities of relief from a catarrhal stomach (so diagnosed and treated). He said that he had taken enough pepsin and charcoal to load a ship. The diagnosis had been made because of the loss of appetite and a bad breath. I made a gastric analysis, which was negative. The stool examination showed a faulty starch digestion. A nasal examination disclosed an engorged mucosa, and enlarged turbinates. Dr. Thomason removed the turbinates, and I gave him catarrhal vaccine, plus a supportive treatment. Six weeks later there was a complete cure; the bad odor had disappeared and the patient was well. Because of this odor, the doctor had been a social outcast. One year's time has since elapsed with no return of the trouble.

For a year Mr. F. had been a visitor to my office for a facial erysipelas. Ichthyol and time gave no results. Three years ago gave him erysipelas phylacogen, two injections. The area cleared up and there has been no return to date.

Six weeks ago I was called by Dr. I. in consultation. The patient, an engineer, had been in bed three weeks with

an acute multiple arthritis. Ankles, knees, wrists, and right shoulder were swollen and tender. The attending physician had been giving him rheumatism phylacogen, with indifferent results. Upon examination I found a purulent pocket in each tonsil. I applied iodine to the tonsils, gave him the phylacogen intravenously and the patient was back at work in ten days. The negative results might have been blamed on the by-product, had it not produced a cure after the constant source of supply of the infection had been removed.

Dr. G., of southwestern Kansas, came into my office last November, walking with the aid of a crutch and cane. He was on his way to Excelsior Springs for a water cure. The physician frankly told me he did not think much of my opinion, when after examination I told him he must go to the hospital, have his tonsils removed and also take rheumatism phylacogen. But finally he consented to try it. Dr. Thomason removed the tonsils and I gave him the phylacogen intravenously, eight injections in all, with a rapid disappearance of the swelling and tenderness. Two weeks later the doctor left for home and did not need either crutch or cane. Three months later Dr. G. called me to his county in consultation. We drove thirty miles in an open car, but the physician suffered no inconvenience and was doing the biggest winter's work of several years.

Dr. W. called me to Kansas to see a case that he had been treating with rheumatism phylacogen with only aggravated results. I found the patient to be a man 36 years old, with the right knee swollen. The doctor did not like my suggestion that it was without doubt a gonorrheal joint, as most of the single acute joint cases are. I went into close communion with the patient, and verified my suspicion, suggested the proper vaccine to the attending physician, with a resulting speedy recovery.

I saw, in consultation with Dr. H., a woman 42 years old, who gave the following history:

Patient stepped from a street car into a hole in the

street, with a badly sprained ankle as a result. The joint was strapped and the patient rested for six weeks. A little later she complained of pain in heel on pressure. A diagnosis had been made of broken arch, and supports advised with no results. I examined the mouth and throat for an infection and found a pyorrhea. An autogenous vaccine was made and given at three-day intervals for nine doses, with complete recovery.

Three years ago I was called to see a child five and a half years old; diagnosis, whooping cough; orthodox treatment given with the usual results. Child coughed more or less from April until August. Two years ago I saw three children in consultation; diagnosis, whooping cough; advised pertussis vaccine (Parke, Davis & Co.). Paroxysms diminished after second injection and disappeared completely on the twelfth day.

In March, 1914, I was called to Nebraska to see a patient 62 years old, afflicted with pneumonia. Oxygen was being used; and the attending physicians had given a most adverse prognosis, in which, after seeing the patient, I agreed with them. We gave him pneumonia phylacogen intravenously. A chill occurred in forty minutes and in six hours the patient's temperature and pulse were lowered. Five days later the old gentleman was reported up in a chair. The ultimate recovery was complete.

In the use of bacterial by-products, I have never had an untoward result, simple slight rise in temperature and pulse-rate in some cases, a typical serum sickness, chill, nausea, and in one case a slight dysentery.

In pyelitis and cystitis, in my experience, the colon bacillus must always be considered when a vaccine is used.

Otitis media is amenable, in my experience, to a vaccine. In acute arthritis I have always had consistent results.

When seeming failure comes after using a product, stop, check up on your diagnosis, give the patient a rest, and then if sure of your diagnosis, commence the treatment again with varying dosage.

Also remember that an important factor is the supportive treatment, of which gastro-intestinal cleanliness is a part.

I do not want to leave the impression that miracles can be performed by the use of bacterial by-products, or that my results cannot be duplicated by yourselves. I have had cases sent to me of several years duration, with painful, swollen and fixed joints, expecting relief and free motion. Oftentimes the tenderness can be relieved, and under an anesthetic the adhesions broken up, then with passive motion, covering a long period of time, you may be surprised at the good results obtained.

I always explain to the patient the reaction, all of the unpleasant side of the treatment, also that the length of time necessary depends entirely on the results.

In conclusion:

- 1. A case not cured is not as good an advertisement as a case not treated.
- 2. That a small dose as a beginning is better than a larger dose with a severe reaction, which oftentimes makes the patient refuse further treatment.
- 3. That a by-product given when a mistaken diagnosis has been made may make an "anti" of that patient.
- 4. That we increase the defensive powers of our friend, the leucocyte, when, by giving the vaccine, we prepare the bacteria for phagocytosis.
- 5. That a decrease in the defensive forces of the host is, in a measure, equivalent to the increased aggressiveness of the infecting bacteria.

And, gentlemen, most important of all, and the one thing to remember is this: A vaccine, serum, or filtrate gives us aid in overcoming the infection of the involved area, but we ask too much when we expect that support to continue to combat the fresh daily onslaught of millions of bacteria poured in from a focus that has not been thoroughly eradicated.—Medical Herald.

# Pbituary.

PAUL FITZSIMMONS EVE, M.D., the second of his name to add credit and renown to the capital city of Tennessee, died at his residence, 1529 Broadway, at 6 P.M., Saturday, Dec. 26th, 1914, in his 58th year. His mortal remains were interred at Mt. Olivet, after funeral services at the First Presbyterian Church at 2:30 P.M., Monday, Dec. 28th, conducted by Rev. J. I. Vance, and largely attended by his many friends and admirers; the honorary pall-bearers being his brother elders of the church, the deacons serving as active pall-bearers.

Dr. Eve was born in Nashville in 1857 at the old Eve residence, now occupied by the Eve Building on Church Street. the son of Dr. Paul F. and Sarah Ann (Duncan) Eve. He attended the public and private schools in this city and was two years in the literary department of Vanderbilt University. He graduated in medicine in the University of Tennessee in 1879 and after a post-graduate course, at the medical department of Columbia University, (the College of Physicians and Surgeons), of New York City, in 1880; immediately after, becoming associated with his brother, Dr. Duncan Eve, in the practice of his profession, the partnership continuing until Oct. 1st. ult., when it was dissolved my mutual consent, and he removed his office to the Hitchcock building, corner Church St. and Sixth Ave. He was an ex-President of the Nashville Academy of Medicine and the Davidson County Medical Society; an ex-President of the Tennessee State Medical Association; a member of the American Medical Association, and other local and special organizations. He was made demonstrator of anatomy in the Medical Department of the University of Tennessee, in 1880, and after a few years of efficient work was made Professor of Anatomy, succeeding his brother until his resignation eight years ago, in the Chair of Surgery and Dean of the same institution, on the organization of the present Vanderbilt University, Medical Department, with which his brother affiliated.

He and his brother were also associated as surgeons of the L. & N. and G. S. R. R., the N. C. & St. L. R. R., and the Nashville Railway & Light Co., from early in the '80's until October last.

Dr. Eve in his early manhood became a member of the First Presbyterian Church of Nashville and took a deep interest in religious matters. He has been a deacon and then an elder in that church for near three decades, serving his Master faithfully and well. It has been his custom for many years, to read a chapter or more in the Bible every day, and for a number of years past he has read it through annually from Genesis to the end of Revelations. He was married about thirty years ago to Miss Jennie Brown, one of the daughters of the late Wm. Brown, Esq., of Nashville, who together with two children, Mrs. Joe Fall and Paul F. Eve, Jr., survive him. He is also survived by his brother, Dr. Duncan Eve, and his sister, Mrs. S. E. Drane.

As a surgeon and a teacher of surgery his reputation for efficiency and success extended far beyond the confines of his native State. As an operator, being well versed in anatomy, he was bold beyond most if not all of his colleagues and contemporaries; yet his boldness was ever tempered with a strict and thorough conservatism, enabling him to attain a high degree of efficiency; in two notable instances, the one a laminectomy for fracture of the lower cervical vertebrae, the other a hip-joint amputation, both charity cases that had been declined by older and more experienced surgeons, was he successful.

Of grand proportions physically, of erect and manly stature, he was commanding in presence; courtly, kindly but unostentatious in his bearing, he loved the peace and quietude of his home circle, a fond and affectionate husband, a kind and loving father, earnest and sincere in his devotion to his family and relatives, his many friends, his religious faith and his profession, he was a noble son of a most noble sire, whose loss will be greatly felt and mourned in the community in which he lived.

Although slightly indisposed for two or more weeks, he was up and about in his daily round of duties until the Sunday preceding his death, the immediate cause of which was a septic infection, gas bacillus in type, of obscure origin, he becoming unconscious thirty hours preceding the end. While conscious, recognizing the extreme gravity of his illness, he evinced no doubts or fears, but with a firm and abiding faith manifested a willingness and a readiness to answer adsum, to the call of his Master, summoning him "to the promised land, beyond Jordan." His work on earth having been completed, he has gone to receive his reward.

ELIAS J. BEALL, M.D., Tulane University, New Orleans, 1857; ad eundem, Missouri Medical College, St. Louis, 1876; Honorary, Missouri Medical College, 1880; a Confederate veteran with service as surgeon of the Fifteenth Texas Infantry and later as chief surgeon of General Walker's division; one of the organizers of the Fort Worth Medical College and for four years professor of principles of surgery and president of the faculty; one of the founders of the Protestant Sanitarium, Fort Worth; died at his home in Fort Worth, October 20, 1914, aged 80. As a tribute to the memory of Dr. Beall, his portrait and a chair in the faculty room of the Fort Worth School of Medicine was draped in mourning for thirty days. At a special meeting of the Tarrant County Medical Society, October 21, addresses eulogistic of Dr. Beall were made by several of the members and it was decided that the society as a body attended the funeral.

# **E**ditorial.

#### OUR THIRTY-SEVENTH VOLUME.

In continuing our editorial efforts after having completed thirtysix years in harness, we again desire to sincerely thank our many friends for their kindly support and patronage, some of whom, both among our reading clientele and advertisers have been with us continuously since 1879, and others for quite a number of years. When such men as Nathan S. Davis and Nicholas Senn were to be found on our subscription lists from the initial number of this journal until they were called from their labors, their annual contributions to its support coming as regularly as each year rolled around, as well as others, if not so well known to fame, yet as sincere and earnest in their devotion to the principles and practices of honorable and regular medicine, we can but feel with a reasonable degree of pride and satisfaction that our efforts have been laudable, reputable and worthy, and fully justify a continuation of our efforts along similar and identical lines in conducting an independent medical and surgical iournal.

This journal in the future as in its successful past, will encourage every doctor to become an active member of his local and State Medical Association, as well as sustain, support and encourage all rational methods and measures of the national organization, believing that "in unity there is strength;" it will, however, oppose and discountenance "clique" or "gang rule" in all things connected with regular medicine. It will be our endeavor at all times to tell the truth and state the facts in relation to all subjects given editorial discussion in its pages, without fear or favor; and although we may differ with the views of others, or oppose and condemn some things, it will be done in a kindly spirit and in a sincere and earnest endeavor for the best interests and welfare of Regular Medicine, and those relying on the same for help, aid and assistance in their hours of suffering, trouble and distress.

While we are not responsible for the views of our contributors, yet we shall at all times maintain a careful scrutiny of all that may appear in our pages, and shall endeavor to limit our space both in the "Original Department" and the "Selected" matter culled from foreign and domestic publications to such as we deem may be of interest to our readers; yet we will not debar therefrom views differing with our own, provided they show a reasonable degree of sincerity and earnestness of purpose in behalf of honorable Regular Medicine.

Our advertising pages we will continue to hold open to all "Proprietary Preparations" that in our opinion and experience, or that of other reputable practitioners, may have merit, notwithstanding the assertions of a "ring of clique" and those who are willing to blindly submit to such dictation. In the sixteen members of "the Council on Chemistry and Pharmacy" of the American Medical Association, even including the five who are residents of Chicago, we do not find such an array of talent, especially in the important field of Clinical Experience, to justify a reliance on their "ipse dixit;" and furthermore, we can fully rely on the intelligence of our readers to properly weigh and consider any statements that may be made by any of our advertisers.

In this connection we desire to submit the following special references to some of the preparations that have come under the ban of the Council on Chemistry and Pharmacy:

"Hayden's Viburnum Compound" was first suggested to us nearly forty years ago by an able, competent and observant practitioner who had served his State faithfully and well for four years as an Army Surgeon, and having tried it time and again, we have found in every instance that it afforded advantages and secured results far in advance of any prescription that we had or have been able to formulate. "Fellow's Hypophosphites" and "Battle's Bromidia" we have been using whenever occasion required for more than thirty years; the one being an exact duplicate of the old Churchill formula of sixty or seventy years ago, compounded with a degree of accuracy, certainty and reliability as to purity of constituents that could not be relied on in 98% or more of the average prescription druggists in any city or town; the other composed of definite amounts of the Bromides with Chloral and Cannabis Indica of absolute purity, with a larger amount of the Bromides in the ordinary dose of a fluiddrachm than can be secured by any of our retail pharmacists. may be said of Peacock's Bromides, as well as some other preparations yet to be mentioned, all having secured a reputation as "Standard" by hosts of active, working and honorable practitioners of medicine. Mellier's Tongaline, owing its effectiveness greatly to the salicylic acid made from the oil of wintergreen, has never failed us in its results. Pepto-Mangan (Gude) is a hematinic tonic of unquestioned value. Gray's Glycerine Tonic Comp. we had been using fully five or more years before the name was copyrighted by Purdue-Prederick Co., and from an autograph formula of Dr. Jno. P. Gray, so long at the head of the New York Hospital for the Insane at Utica, the only difference being that when put up by a reliable prescription pharmacist it cost three dollars for a twelve ounce bottle. Lambert's Listerine and Kress & Owen's Glyco-Thymoline have estab-

lished reputations that cannot be gainsaid or banned by any blasts Antiphlogistine early in its history obtained from Pucky's bazoo. such a hold on the professional favor of able and conscientious practitioners that a number of imitations and substitutes have been compounded, none of which have been able to supplant it. Our first use of it was at the suggestion of a Vice-President of the A. M. A., whose standing is as high as any in the land. Prunoids, a phenolphthaline compound we can mention from a personal standpoint, being well advanced in years, somewhat sluggish and inactive bowels have been an annoyance for quite a lengthy period, and after using time and again various laxatives, nothing has proved so satisfactory; and then the moderate cost—only fifty cents a box—for an agreeable, palatable and convenient tablet, certain in its effect. and Phenalgin, both coal-tar derivatives, have "many a time and oft" enabled me to relieve pain and agony without resorting to the more dangerous habit-forming alkaloids of opium. And yet there are others, Sal Hepatica, Pil. Cascara-Robins, Glyco-Heroin, Cystogen, etc., of like well-known and established characteristics that have come under the ban of this Council of Chemistry and Pharmacy, unreasonable as well as unjust, but time and space preclude further special consideration.

Our action as to the character of both reading and advertising pages has met with such satisfactory results in the past that we are amply justified in continuing along similar lines, notwithstanding the opposition of a "ring" or "clique" under the leadership of a proven quack and charlatan, so unworthy the position held by Davis, Culbertson, Hollister and Hamilton; a veritable blot and blemish on the good name and fame of the greatest medical organization in the world.

And then we are in quite good company, deeming it an honor to be banned and boycotted along with the great independent weekly medical publications of Boston, New York and Cincinnati, to say nothing of such monthly contemporaries as The Therapeutic Gazette, Critic and Guide, N. Y. Medical Times, N. O. Medical and Surgical Journal, Chicago Standard, Pacific Medical Journal, Louisville Medical Monthly, Charlotte Medical Journal, Va. Med. Semi-Monthly and quite a goodly number of others, all being under the editorial control of able, honorable and reputable members of the medical profession, peers and superiors to any of the members of the Council on Chemistry and Pharmacy; and last, but not least, we must not fail to add our own home contemporary, the Nashville Journal of Medicine and Surgery, with its more than half a century of useful existence, under the editorial control at different periods of three grand men who had attained the high honor of President of the A. M. A.

and now owned and edited by a son of one of them, and who served his novitiate under all of them—shall the work of such a man be banned and boycotted by a "ring" or "clique" led by such a small perSimmons?

In conclusion, we quote the following from an editorial by Dr. Henry Waldo Coe, in the October issue of the *Medical Sentinel* of Portland, Orgeon, which we most heartily endorse:

\* \* \* "The privately owned journals are the only safeguards in the country to independent medical progress. \* \* \* The independent press is the virile, throbbing, human, real thing. The great bulwark of the medical profession is now, and always has been, and ever will be, the independent medical press. Here is where those wounded by the machine may have their torn sides dressed. Here is an altar, dedicated to freedom, where the mighty Truth finds a place to proclaim itself. So long as the independent press maintains there is some hope of ultimate fairness in the A. M. A. Here is the forum, where justice has its defender, and where the lowliest doctor in the land may be heard. Here, in an impersonal way, or even in a personal way, the troubles of the doctor are discussed, and plans sought for his relief. It is the journal of sentiment. It is the living, throbbing, sentient friend and companion of the 'ordinary doctor,' and therefore is of interest, even to the extraordinary doctor."

#### AND NOW AS TO 1915.

The opening days of the New Year are of great moment indeed. Hapsburgers, Hohenzollerns and the disciples of Mohammed are arrayed in "grim visaged war" with its "wrinkled front" against John Bull, Johnny Crapeaud, "the man who walks like a Bear," even including little Portugal—the latter reminding us of a statement of an old line whig in days of yore, who said-"and here is Martin Van Buren, like a sap-sucker, clinging on to the coat tail of Andrew Jackson." The once triple—now reduced to a more limited alliance by the good sense and prudence of the Dagos, are having anything but a livelyrather a most deadly dance with the triple entente in the vine-clad vales and fertile fields so often blood-stained in past centuries by Goth and Vandal, the Hordes of Attila, the legions of Julius Cæsar, and other barbarians of past ages with a ferocity that would astonish a Sioux, an Apache, a Creek, Cherokee, or a Choctaw of the pre-historic days of this continent. Sclav and Serb, Catholic, Mohammedan, and many other creeds in one "red burial blent."

Well, why should we worry? Our sympathies alone should give' us thought. With an unusual and never precedented demand for our horses and mules, our cattle, sheep, and our hogs and hominy, a bumper wheat crop harvested and a greatly increased acreage sown,

with a foreign demand for barbed wire, steel and iron products, and other articles of mill and loom, forge, furnace, and workshop—our outlook should be fair indeed.

As to the patrons of this Journal we have so far seen but very few evidences of "cold feet," and the beginning of the New Year, as evidenced by our subscription lists, enable us to heartily endorse the following lines that have been passing around:—

How dear to our heart is the steady subscriber, Who pays in advance at the birth of each year, Who lays down the money and does it quite gladly, And casts round the office a halo of cheer.

How welcome his check when it reaches our sanctum;

How it makes our pulse throb; how it makes our hearts dance!

We outwardly thank him; we inwardly bless him—

The steady subscriber who pays in advance.—The Lamp.

PITUITARY EXTRACT IN OBSTETRICAL PRACTICE:—Physicians who are employing pituitary extract in cases of delayed parturition will be interested in this excerpt from an announcement by Parke, Davis & Co., which appears in the December issue of a contemporary:

"The clinical indications for Pituitrin are such as to demand that it be of high activity. It is equally important that it be uniform in strength. Owing to unavoidable variations in the fresh glandular tissue, the amount of gland substance represented in a preparation is not an accurate index of its strength. Uniformity in therapeutic activity can be obtained only by rigid assay.

"Because of its importance in obstetrical practice we have given much attention to a determination of the proper strength and standardization of Pituitrin. The result of our investigations is a product of high potency, representing the average activity of 0.2 gramme of fresh posterior pituitary lobe to each Cc. of the solution. As an oxytocic Pituitrin stands without a rival. There is no more active pituitary extract.

"Pituitrin, P. D. & Co., is standardized by the two accepted methods of determining pituitary activity: the blood-pressure test and the oxytocic test, the latter by use of the isolated uterus. Every lot of Pituitrin represents the same high degree of activity."

Administered during the second stage of parturition (it should not be given during the first stage), Pituitrin is said to convert a case of tedious inertia into one of normal rhythmic labor, saving time, preventing suffering, and diminishing the risk to the child which attends upon protracted labor. It is supplied in glaseptic ampoules of 1 Cc. and ½ Cc. capacity, convenient for hypodermic injection.

THE TUBERCULOUS INVALID:—The pricking of the Friedmann bubble but served to still further confirm and accentuate the vital importance of the well defined methods of treatment for tuberculosis that have given such encouraging results, i. e., fresh air, sunshine, rest, nutritive reinforcement and judicious medication. A proper combination of these four remedial factors is practically certain to place the incipient tuberculous invalid upon the road to recovery, if the patient is intelligently handled and the treatment persisted in. While it is, of course, acknowledged that the first three non-medicinal agents referred to constitute the vital elements of the upbuilding régime, considerable aid is afforded by judicious medication. Hematinic reinforcement should certainly not be neglected, in view of the secondary anemia which is almost always apparent. agents which have produced the best results in the revitalization of the blood, Pepto-Mangan (Gude) is the most generally eligible and acceptable. As it is thoroughly palatable, neutral in reaction, free from irritant properties and devoid of constipating effect, the digestion of the patient is not disturbed, while the appetite and general vital tone improve more rapidly and satisfactorily than when hygienic and nutritive measures are depended upon exclusively.

ANADEMIN is a common remedy for the common symptom—Dropsy, and is a scientific compound of the active principles of the freshest drugs, selected with great care to produce a remedy of uniform strength. It is advertised to the profession only. A liberal sample for trial treatment will be mailed to any physician on application to the manufacturers. It acts upon the circulation, accelerates the flow in the thoracic duct, rapidly returning the serum to the blood by the lymphatic channels as well as by resorption into the blood by healthy arterial tone, from whence it is removed by diuresis and purgation.

There is no other preparation, combination or therapeutic agent of its class, combining the active principles of Apocinum, Strophanthus, Squill and Sambucus, giving the same results as Anedemin. Physicians are cautioned against imitators, substitutes or inferior combinations.

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IN ANEMIA AND CHLOROSIS, where the motor functions of the stomach are not disturbed, yet there is a decrease in secretion of gastric juices, Seng is of greatest value as collateral treatment.

GLYCO-THYMOLINE IN TYPHOID FEVER:—To keep the alimentary tract as free as possible from fermentable matter, to inhibit as far as possible the activity of the putrefactive bacteria which normally inhabit the intestinal canal, and to eliminate the toxin produced by the Bacillus Typhosus as rapidly as possible are desirable results to accomplish in treating Typhoid cases.

The power of Glyco-Thymoline to produce these results is amply proven by clinical reports from eminent physicians in all parts of the country.

The distressing condition of fissured tongue and "cracked" lips is immediately relieved and the sordes of teeth and mouth quickly removed by the use of Glyco-Thymoline."

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

THE DIETETIC AND HYGIENE GAZETTE, which is just completing the thirtieth year of its existence, has been purchased by the Critic and Guide Company, and, beginning with January, 1915, will be consolidated with the *Critic and Guide*, and the combined journals will be under the editorship of Dr. William J. Robinson. The offices of publication are at 12 Mt. Morris Park W., New York City.

TACHYCARDIA:—When "functional," as in "tobacco heart," this disease is often difficult to treat. As in other forms of cardiac neuroses, the use of the disturbing stimulant must be interdicted. If the heart is sustained in the interim between the paroxysmal attacks by Cactina Pillets the organ will be strengthened and the attacks decreased.

MISTAKEN PROPHETS:—Sixty-seven years ago the prophets were quite as confident as they are today, but they had not reduced the business to such a science, and it lacked much of being exact. For instance, a newpaper published in 1847 contained an article, copied from the Encyclopdia Britannica, by a statistical expert, in which he estimated that the population of the United States in 1905 would be about 168,000,000 people. In 1966 we are to have 672,000,000. In 2002 we are to have a population of 1,344,000,000, and by 2030 we are to have a population of 2,688,000,000. If the guess at the population in 1905 is to be taken as a criterion we need not be afraid of being elbowed into the sea in the near future.

NERVOUS IRRITABILITY FOLLOWING A DEBAUCH:—For the relief of the nervous irritability following over indulgence in alcohol, PASA-DYNE (Daniel) will produce results of a highly gratifying character. These patients want cessation of the intense irritability, they want sleep, and in PASADYNE (Daniel) they may secure them. PASA-DYNE (Daniel) the concentrated tincture of passiflora incarnata is the ideal sedative. Effective and free from untoward results, it can be given without a feeling that evil effects may follow.

A sample bottle may be had by addressing the laboratory of John B. Daniel, 34 Wall Street, Atlanta, Georgia.

A GENERAL CARDIAC TONIC:—Cactina Pillets are extremely useful as a general cardiac tonic, and are preferable for prolonged treatment. They should be included in the treatment of endocarditis, pericarditis, myocarditis and angina; in neurasthenia of old age, and when given during gestation will strengthen the heart of both mother and child.

The physician who desires to use the best preparation of Cereus Grandiflorus should specify Cactina Pillets.

RUSSIA PROMISES TO ADD TEN MILLION more men to those already in the field, which, it is estimated, will amount to about fifteen million all told. According to German authorities, the Czar has lost one million six hundred thousand soldiers, but if ten million more can be put in their places, the loss will not be felt. Fifteen million ought to be able to kill the soldiers of an ordinary nation with sticks.

### Selections

GAS GANGRENE:—Attempts are being made at the Lister Institute to provide a suitable antitoxin for use in "gas gangrene," the condition which has proved to be the great surgical novelty of the war. As a result of an investigation just finished by Sir Anthony A. Bowlby, C. M. G., Colonel, A. M. S., Consulting Surgeon to the Forces Overseas, and Dr. J. Sidney Rowlands, it is believed that the disease is associated with the bacillus of malignant edema. A sample of earth from a trench was used in solution and with a few drops of this a guinea-pig was inoculated. The animal died within eighteen hours. Post-mortem examination showed the presence of a similar gangrenous cellulitis, and that the animal was infected with a spore-bearing anerobic organism belonging to the same group as the specific organism of malignant edema. The conclusion has therefore been drawn that the gangrene found among the wounded is a "traumatic infection" beginning at the moment of injury, due to infection from the soil, and quite distinct from so-called "hospital gangrene."

Cases seen by these observers were limited to wounds of the extremities, especially where large bones were shattered and muscles extensively torn and extruded. Fractures of the femur were especially common, but cases were not necessarily limited to fractures. The onset was as early as thirty-six hours, and death resulted as early as the third day. Swelling of the injured part was seen at the beginning, followed by severe pain, due probably to tension. the latter stage complete numbing manifested itself. discharge from the ragged and sloughy wound was characteristically offensive. The skin assumed a dark purplish or slate-colored hue, if not previously discolored by extravasated blood, and later the color approached green. the condition advanced it became nearly black, and finally the slough appeared black and leathery. Beyond the dis-

colored area "the limb was swollen with gas and fluid exudation, and an emphysematous crackling could be elicited on pressure with the hand. This may spread to a distance of as much as a foot above the actually gangrenous area. and so rapid is the extension of the gangrene that the whole of the lower extremity may be completely mortified by the third day." High temperature was rare, 99-100 degrees being the average. Respiration was sometimes hardly perceptible, although it was only slightly quickened. heart's action was feeble. Death appeared to be due to cardiac failure. In the severest cases the odor from the limb was so overpowering that a thorough post-mortem was almost impossible. Incisions before or after death caused gas and sanious fluid to bubble out. Pus was only slight.—London Letter, in Cin. Lancet Clinic, Dec. 19, 1914.

METHYLENE BLUE SILVER IN BUBOES:—Saphier and von Zumbusch (Deut. med. Woch.) report their experiences with methylene blue silver in 124 cases of suppurative inguinal adenitis. The results were as follows: 10 per cent of the cases were cured in two days; that is, at the first change of dressing the point of puncture was closed, no signs of inflammation persisted and no pus or serum could be obtained either by suction or pressure. In twenty per cent it took three to five days, in thirty per cent six to eight days and in thirty-five per cent about two weeks to eradicate the buboes. In 5 per cent of the cases the virulent type of bubo developed, the prognosis in these cases having been bad from the outset, but even here a more beneficial effect was noted than in patients treated with the usual methods. The time required to terminate the process was not in accordance with the size of the inguinal swelling. Very small buboes occasionally were virulent, while very large ones, at times already discharging pus, frequently healed with astonishing rapidity. The following technique was employed: The diseased area was shaved, cleansed with benzine and disinfected twice with tincture of iodine. A puncture was made in the middle of the suppurating gland very quickly with a narrow scalpel, no anesthesia being employed. The pus was removed with a Bier suction cup and by gentle pressure along the edges of the bubo. The cavity was then filled with methylene blue silver solution by means of a 10 c.c syringe with an asbestos piston. A moist dressing was then applied and not removed for forty-eight hours. Whether 1/2 per cent, 1 per cent, 2 per cent or 5 per cent solutions were used made no apparent The remedy produced absolutely no pain. difference. at the first change of dressing, it was possible to express serum, the injection of methylene blue silver was repeated twice or three times at intervals of two or three days, while the absorption of infiltrations was hastened by the local application of moist heat. Control treatment was carried out chiefly in cases having buboes on both sides. One per cent silver nitrate, 5 or 10 per cent protargol, 1 per cent sodium chloride and sterile water were used. Of these sterile water showed the greatest efficiency, but it could not equal the results occasioned by methylene blue silver. From their investigations the authors conclude that in the treatment of suppurating inguinal adenitis, the best results by far are obtained with methylene blue silver.—Med. Fortnightly.

COLLOIDAL COPPER IN THE CURE OF CANCER:—Among the numerous remedies suggested for the cure of cancer in the cases in which the surgeon finds himself impotent, namely, when the cancer is disseminated with deep nodules and undermining infiltrations, inaccessible and inoperable, attention has been called to substances capable of fixing themselves upon the neoplastic tissues or upon the parasitic agents.

Among the many disappointments caused by the use of such remedies, it seems that results really extraordinary,

so much so because they concern inoperable cases, have been obtained by a chemical preparation of colloidal protoxis hydrate of copper, which the discoverer has named cuprase, and it is used hypodermically. It is put up in ampoules of 5 c.c., each containing 121-100 of a milligram of copper.

Under the action of the remedy, according to the report of several experimenters, the cancerous tumors decrease in volume, and at the same time the infiltrated ganglia become smaller and the pain is lessened and ceases.

Wolze and A. Pagenstecker (Munch. mediz Wochen, 1913, No. 19), report the case of a man sixty-eight years old who had a sarcoma involving the right tonsil and the pharynx, with large ulcerations. The nature of the tumor had been confirmed by histologic examination. In the three last months, owing to the impossibility of taking sufficient nourishment, the patient had lost weight to an alarming degree. The various treatments employed, including radio therapy, having failed, the above named doctors decided to try the injections of cuprase in doses of 5 c.c. each, and in seven months they injected 687 hundred milligrams of pure copper. The result was unexpected, because the treatment produced an improvement of the general condition and a reduction of the tumor.

After a certain period of such treatment, the patient was put again under the prophylaxis of the X-rays, and the improvement already obtained by the hypodermic injections of the cuprase became so marked that he gained thirteen kilograms, and was able to return to his occupation.

Considering that the X-rays, already used before the new treatment, had not given satisfactory results, it must be admitted that the greatest benefit was obtained by the injections of cuprase, and the more so considering the good results that many other experimenters claim by the exclusive use of this remedy.—Rivista Medica, Milan, May 20, 1914.

A CASE OF GIANT CELL SARCOMA SUCCESSFULLY TREATED BY A COMBINATION OF SURGERY AND THE X-RAYS:—Cures of sarcoma have been previously reported by Pfahler and others. The report of the following case was withheld until a sufficient length of time had elapsed to warrant any positive claims for the action of the rays.

Case.—J. H., age 55; married, 3 children. No family history of malignancy. Had been in good health until the summer of 1910, when a small mass appeared in the neck on the right side, just below the angle of the jaw. This was diagnosed as an enlarged gland and non-interference was advised.

The mass increased in size so rapidly that both physician and patient became alarmed and it was removed. A microscopical examination proved it to be a giant cell sarcoma.

Within a period of less than four weeks another small mass appeared in the neck and X-ray treatments were advised. The mass measured about two inches in diameter and was freely movable. Two erythema doses, in a series of twelve treatments each, were given. A filter of heavy sole leather was used and an interval of four weeks was allowed between each series.

At the end of the second series the mass was about onehalf inch in diameter. A severe dermatitis then appeared and further treatments were considered inadvisable. The remaining mass was again removed.

Immediately following this operation, the patient contracted a severe attack of erysipelas which kept him in bed for about two months. During this period another small mass appeared, and as soon as he was able he returned for X-ray treatments. This time the mass entirely disappeared.

During the following year the patient returned for observation at intervals of about six weeks. There was no evidence of a recurrence.

It is now three years and a half since the last treatments were given and the patient is apparently in fine health.

The incident of the erysipelas seemed to cloud the issue in the mind of the surgeon and he was inclined to give it the credit for arresting the disease. Inasmuch as recurrence took place during and after the attack of erysipelas and the growth was not checked until after X-ray treatments were again begun, his opinion was, I think, not well founded.—Edgar Birdsall, M.D., in N. Y. Med. Record.

CANCER OF THE BREAST:-Dr. William L. Rodman, of Philadelphia, at the recent meeting of the Southern Medical Association in Richmond, Va., gave an address on this subject, which was illustrated by numerous lantern slides. He stated that the proper treatment for cancer was early removal. Much had been said about the X-ray and radium. neither of which had been of demonstrable worth from the standpoint of permanent cure. He had not in his experience seen a case of cancer cured either by the X-ray or radium permanently. Of those cases reported to have been relieved or cured, the original tumor or growth might have been benign instead of malignant. He believed more in the X-ray than in radium, and what had been accomplished by radium had been done better by the X-ray. He thought the profession was running after false gods when they gave up surgical operation for these new fads. speaker said that between 12,000 and 15,000 men and women died annually from this deceitfully terrible disease. If the disease were taken in time, when only suspicion was existent, a cure could be effected; but in the majority—and it was a tremendous majority—of cases the patient came too late, or the diagnosis was made too late, to be cured. A careful study of precancerous conditions should be made and all measures of early diagnosis and precaution should be carried to the ultima thule of safety. Cancer was strictly local in the beginning, as shown by every evidence, clinical, surgical, and indicative. Part of the evidence that it was primarily a local disease was that it was not painful in the first year or eighteen months.

only when adhesions began and secondary ulcerations appeared that the disease was painful. In the beginning it was strictly painless. The patients ate and slept well and went through the ordinary routine of life as if there were nothing the matter with them. If an operation was performed in the early stages, before the disease had become constitutional, a cure would result. If, however, cancer of the breast were allowed to continue until there was an enlargement of the glands under the armpit, only 25.4 per cent of the cases would be cured. The disease became secondary, or constitutional, only by transfer from the primary focus, as when it entered and attacked the lymphatic glands. Until this transfer had occurred Dr. Rodman maintained it was strictly local.—Med. Record. Dec. 19, 1914.

CHANCROID, FUCHSIN IN:—Fuchsin in a 5 per cent ointment with petrolatum has been found of benefit in the treatment of carbuncles, and this led the author to try it in soft chancres. Nine cases of undoubted soft chancre showed so much benefit that he is convinced there is no other drug which is so useful. Under ordinary treatment soft sores take about six weeks to heal up, while with fuchsin he has been able to heal them in less than two weeks. The average duration of treatment was eight days.

One case was complicated with bubo in the left groin as large as a small orange. With fuchsin ointment the chancroid healed in six days, and the bubo, which had threatened to suppurate, at once subsided. The ointment of fuchsin (aniline red) is applied to the chancre, after first washing and then drying it. If the prepuce can be brought over the glans penis no other dressing is required, although it is to be noted that fuchsin stains the linen red. The author requires the patient to clean the parts and apply the ointment twice a day, simply because it is difficult to get poor people to learn the benefits of keeping clean. Otherwise, in his opinion, a single application in twenty-four hours quite suffices. Preliminary application of caustics, such as

nitric acid, to destroy the superficial bacteria and infected tissues is not at all necessary. The ointment, even when applied to the most foul ulcers, clears up everything, and within forty-eight hours granulations always spring up. The effect of fuchsin seems to correspond in some respects to that of scarlet red—viz., rapid epidermization; but besides this there is an antiseptic effect. Fuchsin ointment of greater strength than 5 per cent may irritate the parts. It is of no benefit in hard chancres.—C. H. Kantawala, Lancet. May 23, 1914.

PETROLEUM:—It is difficult to understand how the world managed to exist so many centuries without petroleum.

One of the literally crying needs for petroleum is only now being made clear. A contributor to the London Lancet pronounces this world benefaction to be a panacea for infantile colic. Administered to the most pronounced pessimist of the extreme juvenile type, it acts like a charm. The evident regret that he has ever been born is succeeded by a bland serenity and a new outlook on life which is shared by the attendants.

Petroleum is recommended for numerous other ailments of humanity, both internal and external. In fact, the more one can be brought into juxtaposition with this great product the better. A farmer who was greatly troubled with chapped hands had a leaky kerosene lantern. To his surprise he discovered that this annoyance had in some way resulted in curing his hands.

Life at its best seems to be one successive round of pleasures with petroleum. Starting with the cradle, it cures colic. It protects the skin from the elements, and the mucous membranes from irritations. The enlivening odor of gasoline pervades the delight of motoring, as well as the process of removing from fabrics the stains of travel. Therapeutically, mechanically, and socially, petroleum stands in the front as a Rockefeller Foundation of Comfort.—Monthly Cyclopedia and Med. Bulletin.

PESSIMISM IN THREATENED ABORTION:—Many physicians feel that, when there is a show of blood in a threatened abortion or miscarriage, there is no hope of averting the impending event. Not so, for we have known of quite a number of cases in which, after quite a bit of hemorrhage, pregnancy went on to labor at full term.

First of all, don't make a vaginal examination unless absolutely demanded, and it is really seldom necessary. Any such examination simply reduces the chances for staving off trouble. Don't worry about the little blood in the vagina; leave it alone. Unless there is sepsis from criminal interference, the blood can stay where it is without any danger to the woman.

While the morphin hypodermatic is undoubtedly abused, this is one of the conditions where at least one-fourth grain should be given at once; and it may be repeated within two hours.

Normal labor or premature labor usually begins with circular contractions about the os. Gelsemium is a drug which controls such contractions. Give ten-drop doses every hour or two along with the morphin, only not hypodermatically, until the eyes show a definite physiologic response. This drug is seldom dangerous and may be pushed.

Stay with your patient a few hours, push the medication, and keep her quiet and reassured. The reward comes more often than the pessimist would expect.

But don't give any of the atropine or hyoscine group of alkaloids in this condition. At best they are erratic in action and may aggravate the condition in place of helping. Gelsemium and morphin are preferable.—Medical Council.

TREATMENT OF BOILS:—The use of dilute sulphuric acid in the treatment of boils, carbuncles, and staphylococcic infections generally has been reported by several observers. The acid is given in doses of 20 or 30 minims every four hours, well diluted, and remarkable results have been recorded.—Critic and Guide.

CANCER DEATH RATE IN AMERICAN CITIES:—That there is need of the national movement to check the death rate from cancer which has been inaugurated under the direction of the American Society for the Control of Cancer is indicated by the figures of mortality from this disease in The statistics of our seven largest cities, recently tabulated, show that in that year the cancer death rate in each case was the highest on record. For New York City the rate was 82 per 100,000 of the population, against an average of 79 for the last five years; for Boston 118, against an average of 110: for Pittsburgh 79, against an average of 70; for Baltimore 105, against an average of 94; for Chicago 86, against an average of 81; for Philadelphia 95, against an average of 88; for St. Louis 95, against an average of 85. The combined cancer death rate for the seven cities was 89 per 100,000 of population for 1913, against a combined average of 83 for the last five years.

It is held by many that the recorded cancer death rate does not mean an actual increase of the disease to the extent indicated. According to this view improvements in the diagnosis of hitherto obscure diseases has caused cancer to be much more frequently recognized and recorded. Yet these figures of 1913 as compared with the average for the last five years, when we have presumably been enjoying the results of this greatly improved medical technique must be considered most significant, and it is hard to believe that the increase is due solely to greater accuracy of diagnosis.

—So. Cal. Practitioner.

MIDDLE EAR, DANGER SIGNALS IN SUPPURATION OF:—The danger signals indicating operative interference in acute suppuration are: (1) Temperature over 101° F. (2) Non-subsidence of pain and tenderness and temperature after the performance of paracentesis or natural rupture of the tympanic membrane. (3) Facial paralysis. (4) Vomiting, giddiness, and tenderness. (5) Early optic neuritis.

The danger signals in chronic suppuration of the middle ear are: (1) Diminution of discharge with attacks of pain; (2) non-diminution of discharge after careful treatment; (3) fetor of discharge; (4) headache; (5) deep tenderness over the mastoid; (6) deep pain in the ear; (7) sudden increase in deafness; (8) diminution of bone-conduction; (9) vertigo and tinnitus; (10) early optic neuritis.

Occasionally in chronic suppuration one finds an early optic neuritis or slight vascular engorgement without necessarily severe intracranial disease being present. It is probably due to serous meningitis, and is an indication for immediate interference.

Such signs as high temperature, rigors, and severe vomiting, which are often given as indications for performing the mastoid operation, are not danger signals, because when they appear one has passed the signals and is actually in collision with a serious disease. When they have occurred serious measures have to be undertaken, such as opening the lateral sinus, and draining cerebral abscesses or the meninges.—H. A. Kisch, Clinical Journal, May 20, 1914.

THE SINS OF THE FATHER:—Twelve per cent of human sickness today arises from diseases growing out of the social evil. Fully eighty per cent of the young men who sow wild oats become physically tainted and carriers of loathsome infection. Wives and children reap a ghastly share of the wild-oat harvest. Thirty-three per cent of the deaths of children under six months; eighty per cent of the blindness of new-born infants; twenty-five per cent of all blindness; eighty per cent of the diseases peculiar to women; seventy-five per cent of all surgical operations performed on women; over sixty per cent of the work done by specialists in diseases of women; all these are the result of hideous infections thus most innocently contracted.

It is the solemn duty of all parents to advise their adolescent sons of such facts as these; of all physicians to do the like with all the young men they can influence; of all

teachers in personal touch with students who look to them for guidance; of all clergymen able to impress the potent influence of religion upon the consciences of the youths in their congregations. If such influences as these succeed, none others will be needed.—Dietetic and Hygienic Gazette.

SPECIFIC TREATMENT OF PYORRHEA ALVEOLARIS:—Barrett and Smith, of Philadelphia, have found an ameba in the mouth-lesions of persons suffering from pyorrhea, and apparently have proven that this is the cause of the disease. They used emetine (the most powerful amebicide known) as a local application and found it curative.

Bass and Johns, of Tulane University, have verified the results. They found the entameba buccalis in 85 out of 87 cases examined, and in all stages of the disease. They have found that emetine hydrochloride, injected into the arm or elsewhere, hypodermically, will cure pyorrhea. They advise hypodermic injections of ½ grain daily for three successive days; then a ½ grain injection of the alkaloid every fourth to seventh day until the gums have entirely healed and the teeth have tightened. Complete cure may result in a few days or be delayed for some months, according to the extent of the lesions. The drug should also be used locally in a 1 per cent solution, to be injected into the gingival sacs.—Critic and Guide.

DIAGNOSIS OF CANCER:—Marked diminution of the area of cardiac dullness in the recumbent posture, as determined by percussion, was found by Gordon in 87 per cent of 111 cancerous cases and only 16 per cent of 107 noncancerous cases. This sign may be present in cancerous cases that show no wasting. When the sign is present, diagnosis of carcinoma should be rejected only after careful consideration. In some cases the sign has appeared early enough to enable successful resection to be carried out.—Critic and Guide.



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## Priginal Communications.

EXOPHTHALMIC GOITER; KIDNEY STONE; ESO-PHAGEAL STRICTURE; CHOLECYSTITIS; DUODENAL ULCER AND APPEN-DICEAL ABSCESS.

A Clinical Lecture Delivered at St. Thomas Hospital, January 16, 1915.

BY WILLIAM D. HAGGARD, M.D., F.A.C.S.,
PROFESSOR OF SURGERY AND CLINICAL SURGERY, VANDERBILT
UNIVERSITY,

NASHVILLE, TENN.

#### EXOPHTHALMIC GOITER.

Gentlemen:—While the first operative case, one of exophthalmic goiter, is being prepared, I will show you the results in two other cases of the same type.

This patient. Mrs. S., who lives in Lawrenceburg, was operated on two weeks ago. She gave the following history. Her neck was noticed to be larger about four years ago. Her attention was called to it by a choking sensation while eating. The enlargement had gradually grown until it was four times as large as a normal gland. The right side was very much more prominent than the left, and has pained her considerably, it being of a dull character. She still had trouble in swallowing at times. For the last three or four years she has been very nervous. Any noise startles She suffered with a shortness of breath and had a great deal of headache, for which she wore glasses without any benefit. There have been a number of periodical fainting spells, attended with unconsciousness which confined her to bed for two or three days. She was at all times aware of her heart beating very rapidly and very forcibly. There has been a loss of twenty-five pounds during the last three years. The goiter pressing on her throat seemed to give her a dry cough. Her blood pressure was 165.

Glasses did not relieve her headaches. "Please look up." The lower lids lag. This shows Von Graefe's eve sign. "Please look down at the floor." The upper lids lag and expose the sclera, Kocher's sign. Her tachycardia was not very severe, only 110. I regarded it as a favorable case. She was subjected to a right thyroidectomy, one-half of the gland being removed. The scar is the low transverse collar incision. She has had no post-operative trouble whatsoever and sat up on the fourth day. Her pulse has receded to practically normal and there had been no pain at all. I really think it is a very satisfactory case considering that she has had four years of trouble. She is going home today and I asked her to let you see the result of the operation and she gladly assented.

Case II. Mrs. B., 26 years of age, resides in Atlanta. She had a severe type of exophthalmic goiter. In January, 1914, the patient noticed her heart beating very fast on

the slightest exertion. She became very nervous and easily excited and has been progressively losing strength.

Tachycardia has been her chief symptom. The least noise would excite her: whereas, formerly, she was very selfcontained. She had been very weak with marked trembling. The pulse has gone to 180. She stayed in bed fourteen weeks. Under this treatment she improved very much. In addition to extreme nervousness, tachycardia and great weakness, she had some trouble with her head and eyes. but she reads very well without glasses and the eyes are much better now. She has lost fifteen pounds, but has never had any nausea, vomiting, or diarrhoea. largement of her thyroid was very appreciable. When the gland was removed it was found to be much larger than normal and was meaty, no visible colloid at all. her sisters had goiter when she was fourteen years old, the goiter of adolescence, and it disappeared. This patient was operated on a week ago vesterday. I believe she has had less trouble than most of the cases, having no pain and no difficulty in swallowing. She has been under the care of Dr. Richard Dake since July, with complete rest and other symptomatic treatment, and has improved so satisfactorily as to have been in excellent condition for the radical operation. She now has a pulse of 84, which would be practically normal for her. When she goes home she must lead the simple life until she gets entirely and completely well.

Case III. Mr. R., aged 38. Six months ago noticed very loud beating of heart and became very nervous, which has gradually continued and become more marked. He noticed a considerable enlargement of his neck in December. It has been growing rapidly since. Synchronous with the rapid heart and great nervousness he noticed that his hands were so shaky that he could not hold them still. This continued and his tremor is marked. There is considerable shortness of breath aggravated by exercise. He has lost very little weight. Since October his eyes have troubled

him to such an extent that his vision has been blurred and he had glasses fitted, but without much benefit. He is hot at all times, never puts on a coat, keeps his shirt open at the neck and can bear no cover at night. His spells of weakness are periodical and at times extreme. There is a peculiar feeling in the pit of the stomach that makes him



Case III. Exophthalmic Goitre. (Photo taken Jan. 26.)

weak and faint. There are frequent attacks of headache, which are very severe, and his loss of strength has incapacitated him for work.

The most striking symptom is his extreme nervousness and excitability. He is at times flighty, so much so that one who did not know his condition would think he was losing his mind. Seven years ago he had an acute pleurisy, with effusion, which turned out to be tubercular, and I did a thoracotomy and drained the chest for a number of weeks. He has made a satisfactory recovery from that and his lungs are in good condition. There is a little dullness where the pleura has occluded itself at the drainage opening and at the apex there are a few moist rales.

I will attempt to do the shockless operation. He has not been told about it. He was given scopolamine, grs. 1-150 an hour and a half ago, and morphia with atropia 30 minutes ago. He is taking nitrous oxid and oxygen anæsthesia lightly. I will also employ novocain as a local anæsthetic and in that way carry out the annoci-association principle. His pulse is 130. The gland on the right is very much more prominent. The right gland, as you know, is larger normally than the left, and it is surgically easier to remove. I will remove the right or diseased half. We have about six times as much thyroid as we need, so if a patient is not cured by the removal of half of the gland, it is a simple matter to remove a little more. Usually one-half seems to be quite sufficient. In doing that I plan to divide the gland at the isthmus. I make the incision across the neck and through the platysma muscle. With traction on the upper flap it is comparatively simple to dissect it up sufficiently to give a wide exposure. Here you see the anterior jugular vein. It will be necessary to divide this. I now go down in the midline and between the two sternothyroid groups. The gland is now exposed and is covered by its false, fibrous or surgical capsule. It is going to be necessary to divide the sternohyoid and sternothyroid muscles between forceps, in order to make a trap door to give

me access to the superior thyroid artery. This capsule is incised and gently stripped from the gland, and in so doing I lift the gland on to the surface in order to get to the upper pole where I can have the superior thyroid artery in plain view. A good plan, after clamping the artery. is to take hold of the gland just at a point where the superior thyroid artery joins and cut between. The forceps on the upper pole serves as a tractor. In the true or proper capsule there are a good many little blood vessels, so I will just use forceps to the outer side so I can peel it out of the capsule. There is a little filmy connective tissue between the false capsule and the proper capsule of the gland itself. The latter is a shiny peritoneal-like membrane. in peeling the outer capsule back in this way is to keep the important structures like the recurrent laryngeal nerve and the parathyroids behind it. There are a great many small arteries between this capsule and the gland proper that must be accurately grasped and clamped. The inferior thyroid artery lies at the lower pole. The recurrent larvngeal nerve crosses it very near the gland. A good way under these circumstances is to hug the gland very closely in order to get away from the nerve. Now one little vessel is holding yet on the side. I am now up to the isthmus, and that I will divide across as a pedicle from the trachea. It is a very friable gland. No. 1 iodized catgut is used in tying these numerous vessels.

The next step is the closing of the cut muscles transversely, and then where they were separated in the midline. The skin incision will be closed by sub-cuticular sutures.

The per cent of cures in these cases is about seventy-five, taking the good, bad, and indifferent ones as they come. Of course, many cases are being referred to the surgeon that are very far advanced, but operation should be advised early whenever a few months of careful medical supervision fails to bring relief. If these patients pass through the first thirty hours after operation without

thyroid fever, we feel sure they will get through safely. The thing to do, then, in the first thirty hours, if the patient is suffering from hyperthyroidism, is to give them large quantities of water, if they can swallow; if not, give it by the rectum, and if necessary under the skin. The only drug that is of value is atropia.

Dr. Dunklin finds the patient's pulse 135, and at the conclusion of this rather extensive operation is practically what it has been recorded before the operation; hence we feel that our effort to prevent, psychic and traumatic shock has been fairly successful.

#### STONE IN THE KIDNEY.

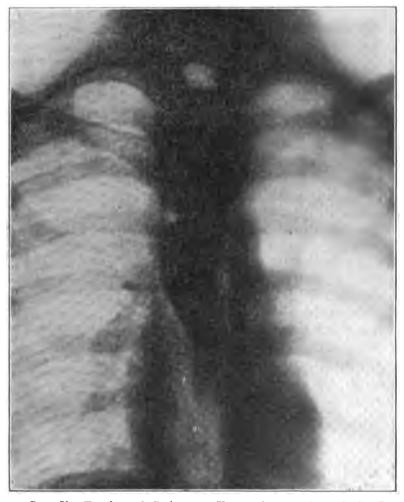
Case IV. I want to show you now the result of a very interesting case of renal calculus. This patient, fifty-three years of age, has a rather interesting history of having had "bladder trouble" for ten years. Frequent urination has been constant for five years. It got worse and she was operated on twice for urethral caruncle without result and then had an X-ray treatment with relief. At that time, in order to discover the cause of the cystitis, Dr. King X-rayed her and made this very beautiful picture, showing a large renal calculus in the left side. She had no renal colic, the reason being that the stone was too big and simply filled up the pelvis and did not give rise to colic. What she did have was an overdistended renal pelvis, cystitis and frequent urination. About ten days before she came she had for the first time great pain in the left side, tenderness, chill and high fever. The presence of the calculus caused suppuration of the left kidney and that drove her to operation, after having been in possession of the X-ray evidence of stone for two years. The operation was very difficult, because the kidney was densely adherent. I could not bring the kidney out, because it was four times as large as it should have been. There was a large pocket of pus which led into the pelvis of the kidney and formed a perinephritic abscess. There was a quantity of pus. too. in the kidney. She is still wearing the drainage tube; she still has six or eight nocturnal urinations. I am going to cystoscope her as soon as she is able, to see if the left kidney is functionating. There is no urinary escape from the kidney abscess, and it may not be secreting any at all and may have to be removed later.



Case IV. Stone in Kidney. X-ray picture made by Dr. J. M. King.

#### ESOPHAGEAL STRICTURE FOLLOWING TYPHOID FEVER.

Case V. Mabel B., aged 10.; Hickman, Ky. In August, 1913, this little girl had typhoid fever for five weeks. During that time she complained that nothing would go



Case V. Esophageal Stricture. X-ray photograph made by Dr. J. M. King, showing shadow of bismuth gruel coming to a conical point at site of impervious stricture.

down easily. She cried when she took water or milk, but could take boiled custard very well. A month after her convalescence she was choked while eating chicken and has taken no solid food since. She spits up all the meat that she has tried to eat at various times, and really lives on liquids and cereals. She vomited up a melon seed last summer two weeks after attempting to eat water melon. Whenever she tries to eat much she feels choky and has to produce vomiting by putting her finger in her throat. On Christmas day she attempted to eat some turkey for the first time, and after swallowing it she felt choked and has vomited everything that she attempted to eat for four days following. Now she can only swallow water or milk with any degree of comfort.

She was sent to me by Dr. H. E. Prather, of Hickman, Ky.

The diagnosis of spasmodic stricture of the esophagus was made in Louisville two years ago after an X-ray picture was made. A bougie was passed and she was put on belladonna. The bougie was only passed three times. Under an anæsthetic I was able to get in a No. 18 (French) bougie. That was two weeks ago. She is having dilatation every other day. I will have to go at it slowly, as any rupture would lead one into the mediastinum. The next case is going under the anesthetic.

#### CHOLECYSTITIS.

Case VI. Miss S., aged 18; Iron City, Ala. During the last two and one-half years she has had fifty or more attacks of cramp colic, beginning suddenly in the pit of the stomach and radiating to the right side of the upper quadrant. The spells are much harder now than in the beginning. During the past year the attacks have averaged one in a fortnight. She is nauseated, but does not always vomit. The spells confine her to bed from one to eight days; temperature in the recent attack was three degrees above normal and lasted three days. That was three weeks

ago. The attacks usually begin with backache two or three hours, then colicky pain in the pit of the stomach, going over the entire abdomen with radiation of the pain between the shoulders, and especially to the right shoulder. lowing the colic and next day she has soreness and tenderness over the right side and under the right ribs. lasts from one to several days. For two weeks now the spells have been so severe that hypodermics of morphia were required and often chloroform to relieve the pain. She often vomits for two or three days with the worst spells and of late has tenderness nearly all the time in the upper right quadrant. There has been jaundice with several spells, but not every time. The eyes and body were both markedly yellow. The last jaundice occurring with the spell three weeks ago. For the past few years she has had much indigestion and foods sour easily. She has had measles and a very hard spell of typhoid fever at the age of three.

It is extremely ususual to see gall stones in so young a patient. The usual condition for gall stones is "fair, fat, and forty," but this patient is only eighteen years of age. The youngest patient I have ever had with gall stones was twenty-one. There have been much younger cases, of course, but they are not the rule. I feel that she has a surgical lesion of the gall bladder demanding operation. Operation on the gall bladder, as you know, is a very frequent one and the incision begins at the tip of the ninth costal cartilage and extends downward for an adequate distance.

In all abdominal cases, and in all cases for that matter, we isolate the field of operation from the skin surface with gauze fixed to the margin of the incision. In a case of this character we must explore the gall bladder, stomach, appendix, kidney and pelvis. I will examine the gall bladder first to see if there are any stones, because of the radiation of pain and the fact that she has had tenderness and jaundice. She has also had typhoid fever. In the last spell, which she had three weeks ago, she had jaundice. The

question is whether or not the stone passed out then, or whether it is a cholecystitis with temporary obstruction to its drainage from an inflamed mucosa giving a little jaundice. I fail to find any stone in the gall bladder so far. She has only had jaundice a few times, and the fact she has had jaundice may also mean that the stone was in the common duct and has passed out. I have one finger in the Foramen of Winslow, but I find no stone.

Now let us look at the gall bladder. If it is white, it is a diseased gall bladder. It is thickened and white. A normal gall bladder is blue, but all blue gall bladders are not normal. If I find any enlarged glands at the base, I would feel that it had better come out, but inasmuch as there don't seem to be any glands, I think the best thing to do would be to drain it. Before doing that I am going over the other organs also to see if there is any trouble with the duodenum, right kidney, appendix, or pelvic organs. The uterus is normal in size and position, as are the tubes and ovaries. The appendix is long and thick, and while not sufficiently diseased to cause such pronounced symptoms—fifty spells in two and one-half years—it is diseased enough to be removed. I do not believe it has been responsible for her symptoms, but it is nevertheless a thickened and diseased appendix.

I now want to see about the right kidney, although she has had no urinary symptoms. It is normal in size and position, and no stone can be felt in the renal pelvis. I feel sure her trouble is with the gall bladder, and I think I ought to drain it. The inside of the gall bladder does not look healthy. It looks like a strawberry. If she were not such a young woman I would certainly take the gall bladder out. I will put in this tube held by a purse string suture, making a bile-tight joint that will drain the organ long enough to overcome the infection.

What is the cause of gall stones? A chronic mild infection of the mucous lining that results in desquamation of

epithelium, which becomes a nidus for the stone formation as a result of the deposit of the bile salts.

Would she be cured if left alone? No. Why not? Because of the thickened, white diseased gall bladder with the strawberry mucous membrane, showing chronic infection. What will it take to cure her? Prolonged drainage or removal.

Patient left the table with pulse of 88.

#### DUODENAL ULCER.

Case VII. Mr. M., 28 years of age, of Sevierville, Tenn., had a gastro-enterostomy three weeks ago. This patient began to have pain in the pit of the stomach, coming on about 10:00 to 11:30 in the mornings, five and one-half years ago. Pain was of an aching character like a hunger pain. was very easy to relieve in the beginning by food, soda water, and always by the noon meal. He occasionally took a few doses of papine. He then began having pain at four or five o'clock in the afternoon, but never had any pain at night. His condition gradually got worse for a year and he had to quit his occupation and went West, where he had some relief for six months. The pain then returned more severely than before, coming on a little later than usual, but food still gave relief. This continued for about two years. After leaving Kansas and going into the mountains he had two months of relief; the pain then came back more severe than before, and for the first time radiated from his stomach to the right side and into the chest and between the shoulders. About a year ago the pain began waking him up at night in addition to the forenoon and afternoon pain. The earliest he would awake would be from nine to eleven, and occasionally with late supper it would not wake him until four in the morning. Food still gave relief until the past six weeks, when nothing relieved the pain, which was mostly in the right side and just below the pit of the stomach. For the past three weeks he has vomited a few times, but never any blood and never noticed any in the stools. During the last year he has lost twenty pounds. He has never had any temperature, no severe colics, no acute attacks. While in Kansas his trouble was diagnosed as gall stones—that was three and one-half years ago, and three years ago as cancer. He has had no typhoid fever and no prolonged illness.

The diagnosis of duodenal ulcer was confirmed by operation three weeks ago. What I did for him was to make an incision for the examination of the stomach and gall bladder, which were both negative. The ulcer was thick, hard, and about two inches below the pylorus. We did the short or no loop gastro-enterostomy. He has not had a single bad symptom, and I can say he is on the way to recovery. Gastro-enterostomy will cure these duodenal ulcers uniformily.

We have had a number of ulcer cases lately, but I think this one has been the most satisfactory from a post-operative stand point.

DUODENAL ULCER.

Case VIII. Mr. W., aged 34, Jasper, Tenn. This patient in the rolling chair is enjoying his first ride since his operation two days ago. I always sit these patients up with a backrest, as it facilitates the restoration of normal visceral relations after a gastro-enterostomy. The history shows that four years ago he began having dull, aching pains over the stomach area four or five hours after the dinner meal. Pain would last until he went to sleep at night. Accordingly, he would not eat any supper, but if he did eat he occasionally got relief, but usually he did not. It seems that the breakfasts and suppers did not produce the pain, that his full meal at dinner did. He has had periods of improvement during the four years, lasting from a few weeks to three or four months. The last one being the longest, from July to October last, during which time he felt well and gained some weight. He has been taking alkalies for relief, but this has only given him temporary benefit. The pain is never colicky or cramp like, but has been severe enough during the last month to require morphia for relief on several occasions. The pain radiates to the right side, but often to the back and shoulders, but neither being worse than the other. Two years ago he began to vomit, which always afforded him relief. The vomitus has never been bloody. For the last two years he has had much soreness and tenderness over the right umbilical and iliac areas, but was free from that during his periods of improvement. The condition during the past month has been worse than ever. The pain being almost constant. He has tried to get relief by drinking whisky without benefit. There has been a loss of fifteen or twenty pounds in weight. An X-ray photograph which Dr. Lacy had made three weeks ago of the bismuth meal showed the absence of the duodenal cap.

#### APPENDICEAL ABSCESS.

Case VIII. P. W. This young man, who is now under the anæsthetic, has an appendiceal abscess of ten days' duration that is prominent, frank, and well marked. You can see it from where you sit. It is associated with a temperature of 101 at this time and a leucocytosis of 18,000. He was taken last Wednesday night a week ago (10 days now) with general abdominal pain, followed early Thursday morning by vomiting. The temperature did not make its appearance, however, until Friday, at which time Dr. Crockett, living in the Hermitage neighborhood, made the diagnosis of appendicitis and advised operation. postponed and on Sunday there was a mass in the right side, which has continued to increase in size until now it is nearly as big as one's fist. Fortunately, it seems to be well walled off and is a favorable case. The incision has evacuated several ounces of extremely offensive, thick pus, of the colon bacillus type. My finger is in a well-defined abscess cavity and I will content myself with evacuation and drainage without searching for or attempting the removal of the appendix. He is practically certain to get well if we stop now; whereas, if we rooted out the appendix we would probably rupture through the wall of adhesions that nature has industriously built around it during the last ten days, and give him a general, instead of a local, peritonitis. Moreover, the appendix has probably done its worst in rupturing and in forming this abscess. It is like a bursted firecracker that has set a house on fire. It is not essential to rescue the firecracker from the burning building. Of all appendices thus left in, about eight out of ten cases give no further trouble. In the event it should, it can be easily removed as an interval operation in the absence of fever and pus with practically no risk.

All cases of appendicitis should be operated on as early as possible. Murphy says whenever an appendix is allowed to perforate before operation that the case up to that time has been maltreated. The greatest mistake we make in acute abdominal cases is purgation. It is distinctly harmful, because it loosens newly formed adhesions by peristaltic action and allows an escape of the infected material. Every case that comes into the hospital with perforation has a history of purgation. Every text-book in the world advises against purgatives in appendicitis, and I regret to say many men in our profession are constantly making this mistake. If the patient is not seen until the third or fourth day with appendicitis, which is a notoriously bad time to operate, requiring the superlative efforts of the most skilled surgeon to thus rescue the patient, it may be advisable, by the starvation and non-purgation method of Ochsner, to allow the case to wall itself off into an abscess just as this one has done. Nobody, however, by this treatment can guarantee it will go successfully to a safe operation on the tenth, twelfth, or fourteenth day; and still, ordinarily speaking, it is probably better in a majority of cases than indiscriminate operation at the most inopportune and dangerous period. If by good fortune the patient escapes peritonitis and abscess and undergoes resolution, with or without, or in spite of treatment, then the operation should be done before another attack.

## Editorial.

#### WHY WE SHOULD BUY GOODS MADE IN U. S. A.

(The following letter to the editor of Collier's Weekly with editorial remarks appeared in the Jan. 16, 1915, issue of that publication, and has our most hearty endorsement.—Ed. S. P.)

"Dear Mr. Editor: Collier's is doing commendable work in urging the American people to buy goods 'Made in U. S. A.' The future welfare of our country and the prosperity of our people depend very largely upon the success of the "Made in U. S. A." propaganda.

"Many publications are encouraging the American people to buy American-made goods without giving specific reasons why they should do so. Dont' you think that the movement will gain greater impetus and accomplish more for the manufacturer, as well as the consumer, if substantiatial 'reasons why' arguments are presented?

"You are a student of national problems, while we manufacturers, who are engaged in import and export commerce, are deply involved in the problems of manufacturing and marketing merchandise. I believe we should work together; therefore I offer you some facts based on my personal experiences in European countries.

"With my associates, I am engaged in the manufacture of an article which is consumed in every part of the civilized globe. Our business orignated thirty-three years ago and in its entirety is owned by American people. We maintain headquarters, offices and warerooms on this continent, also factories in many foreign countries, including France, Germany, Austria and Spain.

"Americans and Britishers always have traveled extensively. Years ago they began to demand our product when abroad, and to satisfy this demand we attempted export shipment. Our American factories were then large enough to supply the universal demand, but when entering the foreign field we found it impossible profitably to clear our merchandise in many ports. Germany, Austria, France and Spain demanded prohibitive duties. This left us the choice of discontinuing our export business or yielding to the demands of the foreigner, which in substance were: 'If you want to do business in our country, you must pay rents to our landlords, use our raw materials and employ our labor.' We were practically forced to equip and maintain factories in the above mentioned places.

"Without any desire to criticise the spirit which prompted the demands of these countries, I will say that the disadvantage to us has been very great. But we have had an even greater disadventage to contend with, to illustrate which I will relate a part of my experience in Germany:

"In Berlin I advertised for a highly trained city representative. Many responded and I interviewed and discharged all but two, who were requested to report to me the following Friday. When one man reported he immediately asked for his references, stating that he did not want the position. Upon being questioned he replied about as follows:

"'I have spent the last two days interviewing the trade and investigating your product. It is American owned and the retailers will not push a foreign-owned product. Their customers prefer and demand articles made only in the Fatherland. I see no future for me with your company.'

"The other man accepted the position, but resigned shortly afterwards. He also found that German people demand goods made in the Fatherland, by concerns owned in the Fatherland.

"Germany has asked us to buy her goods and we have cheerfully complied with the request. American dollars have made German manufacturers wealthy, yet the German people refuse to buy our goods.

"Germany has become a strong nation because her people stick together and work together. They patronize home industry. Nowhere else in the world is the term "home industry" understood and appreciated as it is in Germany.

"Many foreign-made cosmetics, proprietary medicines, textiles, toys and other articles are sold in America in competition with American-made and owned products that are really as good, and in some cases vastly better, at no higher price than the imported goods. Millions of dollars are expended by American people for French soaps, toilet articles, silks, millinery, gowns, etc. One great Paris firm does a tremendous toilet soap business in America, despite the fact that our domestic manufacturers produce superior soaps at less cost.

"Within the last few years foreign manufacturers have established distributing points and even factories on American soil, but they are foreign-owned.

"When we confine our demand for articles we eat, wear or use to those made in America by American capital and labor, then will our American enterprises grow in leaps and bounds, and since many foreign-owned articles are made in this country, or sold through domestic agents, each article should be carefully scrutinized and its ownership determined—so that those which are foreign-owned can be avoided whenever similar products of home manufacture are obtainable.

"The German-American press and the agents of the Kaiser are vigorously protesting against the lack of American sympathy for their cause, but perhaps its does not occur to them that our spirit of fair play, even our sense of humor, does not permit us to approve of or enjoy what may be styled a travesty on reciprocity—a burlesque on equity!

"Foreign governments have done much to assure tariff protection of their industries, but in some countries it has rested with the people as individuals to do far more than it is possible to accomplish by stringent legislation. True patriotism means 100 per cent protection.

"I am withholding the name of the company in which I am interested for the reason that I am not seeking free publicity for its product."

"(The writer of the above letter is Mr. Jordan W. Lambert, of of the Lambert Pharmacal Company, St. Louis. manufacturers of Listerine. We give this information because the letter is fair, interesting and informative, and we are glad to give the writer of it whatever benefit may accrue from our doing so.—E. C. P.)

"We like the above letter because it gives real facts, based upon real experience. Americans are a tolerant, easy-going people in business matters, largely because prosperity generally has come to us without great effort. Our commerce of the future must be based upon more conscious effort, more skill in marketing and more patriotic support of our own industries, because more than ever we are going to face the effort, skill and commercial patriotism of foreign nations.

"Foreign commerce is crippled now, but when the war is over it will meet us with redoubled effort in every market of the world, particularly our own. Therefore it behooves us to se that the goods we consume, wherever possible, are "MADE IN THE UNITED STATES, AND THAT THEY BEAR THE NAME AND TRADEMARK OF THE MANUFACTURER AS WELL AS THE NATIONAL TRADE-MARK, 'MADE IN U. S. A."

"C. E. PATTERSON, Vice-President and General Manager
"P. F. Collier & Son, Inc."

QUALIFIED ANESTHETISTS:—The following resolution was recently passed by the New York Society of Anesthetists: "Resolved, That it is the sense of the New York Society of Anesthetists that the administration of a general anesthetic by anyone other than a regularly qualified practitioner of medicine be not allowed; and that the county and state societies be asked to press legislation to this end and, further, that this action by the New York Society of Anesthetists be published in all the medical journals of the state. (A most excellent measure and should be adopted by every state.—Ed. S. P.)

#### THE AMBULANCE CONSTRUCTION COMMISSION

This is the first great war in which field motor ambulances have been extensively used. It was inevitable that many defects should be found in existing types, and in various quarters experts began to ask whether something could not be done to standardize the patterns and to improve the type. At the instance of Mr. Henry S. Wellcome, the founder of the Wellcome Bureau of Scientific Research, a Commission has been formed, and the names of members show at once that the matter is regarded as of first importance by those most intimately connected with the welfare of the wounded soldier.

Sir Frederick Treves, whose long experience and distinguished service specially fit him for the task, has consented to be the Chairman. The Admiralty is represented by the Director-General of the Medical Department, R. N., while the Quartermaster-General to the Forces and the Acting Director-General, Army Medical Service, represent the War Office. The Birtish Red Cross Society is, of course, represented by Sir Frederick Treves, and the St. John Ambulance Association by Sir Claude Macdonald and Sir John Furley. The remaining members are all experts. This Commission will first and foremost act as a judging committee for the award of prizes of the value of £2,000 provided by the Wellcome Bureau of Scientific Re-These prizes are offered for the best designs of an ambulance body which shall fit a standard pattern motor chassis for field motor ambulances. The last day for the receipt of competing designs is June 30, 1915. It is hoped that the competition will bring in a number of ingenious designs, from which the ideal field ambulance body will be evolved.

It may be asked why the competition is restricted to designs for a body and not for the complete ambulance, including a chassis. The reason is that a chassis takes much longer to build than a body, and that, when war breaks out, it is impossible to get at short notice anything like a sufficient number of any one type of chassis. On the other hand, a standardized body to fit any chassis of approved dimensions can be constructed in numbers at comparatively short notice. And a perfected body is badly wanted to ensure complete comfort for the wounded.

It is hoped that the information obtained by the competition, and in other ways, will be published in some permanent form, available for future reference. Probably in addition to one design of special excellence, there will be submitted various ingenious suggestions which may be incorporated in the pattern design approved by the Commission. For these, a portion of the prize money has been set apart. The first prize is of one thousand pounds, the second of five hundred,

and the third of three hundred pounds. All details of conditions may be obtained from the Secretary, the Ambulance Construction Commission, 10 Henrietta Street, Cavendish Square, London, W. The competition is open to citizens of all nations.

WITH SABRE AND SCALPEL:—Dr. John A. Wyeth, a veteran of the Civil War, an eminent physician and surgeon, lays before us in his new book, "With Sabre and Scalpel," just published by the Harpers, some of the manifold interests and experiences of a life unusually rich in the materials that make memoirs and in the strenuous working and strong thinking that make character. Few reminiscences of the period—the period that includes and stretches far beyond the war—can compare with those of Dr. Wyeth's for wealth and versatility of observation and for the comprehensiveness with which they cover, in particular, two distinct fields, war and medicine.

Dr. Wyeth was born in Guntersville, Alabama, and early conceived the ambition of being a soldier. When the war broke out Dr. Wyeth was attending Lagrange Military Academy. The school closed its doors in 1862, and in that year young Wyeth, who, because his father had enlisted in the Confederate army, was now the head of the home, plowed, planted, and cultivated without assistance ten acres in corn. Later, he himself became a soldier, first with Quirk's Scouts of Morgan's Rangers, later as a private in the Fourth Alabama Calvary.

Dr. Wyeth was eventually captured in a manner as exciting as the author of a war-melodrama could wish, and he had terrible experience as a prisoner at Camp Morton, but, on becoming an invalid unfit for service, he was exchanged.

After the war he attended a medical school, practicing for a short time after finishing his course; but being convinced that the training he had received was too purely theoretical, he resolved to earn money enough to take a post-graduate course, including clinical work. For several years thereafter Dr. Wyeth engaged in business in Arkansas. In 1872 the author entered Bellevue Medical College in New York, where he laid the foundations of his extraordinary deep and thorough knowledge of medical science. Dr. Wyeth is perhaps the most variously informed and versatilely intellectual writer of his generation. He is a man perfectly capable of discussing with authority the technique of surgery, knotty points of history, or the question whether or not telepathy is possible; and in satisfying measure he does these things.

SIMPLE. EFFICIENT AND AGREEABLE: - A great variety of means have been devised for the disinfection of the oral cavity-gargles. sprays, paints, and the compressed antiseptic tabloid-all of which are more or less troublesome, whilst the compressed tabloid is very uncertain, the antiseptics having frequently evaporated by the time the patient uses it. A convenient, effective, and pleasant method to bring a reliable antiseptic into constant contact with the pharyngeal and nasal mucosa, is to direct the patient to put three drops of Sander's Eucalyptol on a piece of loaf-sugar and allow it to dissolve in The volatile nature of Sander's Eucalyptol makes it penetrate every crevice in the oral and nasal cavities, whilst it is also inhaled into the trachea and bronchi, in all of which it exercises a great antiseptic and, by virtue of its aroma, a salutary stimulant effect. In influenzal sore throat this treatment is specific, the headache disappearing quickly and rapid general improvement following, especially if supplemented by internal doses of five drops Sander's Eucalyptol in a tablespoonful of water. Tonsillitis, the rheumatic, scarlatinal, diphtheritic and septic sore throats are all amenable to such treatment. In bronchial and asthmatic affections, it should be combined with steam inhalations to which ten drops of Sander's Eucalyptol have been added. To avoid disappointment Sander's Eucalyptol should be specified. The common eucalytptus oil, containing as it does all woody extractives, is always irritating and, what is more objectionable, nauseous. Sander's Eucalyptol is prepared from the carefully selected leaves of a certain species, and any admixture of wood is scrupulously guarded against. It has no nauseous effect, no heart depressing action, and is standardized, producing always a constant and definite therapeutic effect.

Danger Due to Substitution:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.



THE RECOVERY FROM LA GRIPPE:—Since the first appearance upon our shores of that unwelcome infectious disease known as la grippe. the medical journals have been filled with articles advocating different methods of treating the attack itself and its various complications. But little attention, however, has been paid to the important question of how to best treat the convalescent subject. Among all of the acute infections there is probably none that is as likely to leave the patient quite as thoroughly devitalized and generally prostrated as does a sharp attack of la grippe. For some reason the degree of prostration from grippal infection appears to be entirely out of proportion to the severity of the attack itself. This peculiarity renders it advisable and usually necessary to strengthen and support the general vitality of the patient during the period of convalescence. Complete rest, nourishing food, plenty of fresh air and stimulation according to indications are, of course, distinctly important measures. the same time tonic and hematinic medication should not be neglected. Probably the most generally acceptable and efficient general tonic and hemic reconstituent for such patients is Pepto-Mangan (Gude), a bland, non-irritant and promptly absorbable combination of the organic peptonates of iron and manganese. This efficient bloodbuilder and reconstructive does not disturb digestion nor induce constipation, and is readily taken by patients of all ages.

THE PHYLACOGEN TREATMENT OF PNEUMONIA: - As every physician of experience knows, the mortality in pneumonia is very high, as compared to that of the average infectious disease. The dream of scientific men that a specific for pneumonia would some day materialize has not yet become a fact, and it is probable that it will not for a long time to come. In the opinion of many advanced members of the profession Pneumonia Phylacogen, while not a specific, is the nearest approach to such an agent. Certainly some remarkable results have followed the use of this product in many serious cases that have been reported in recent months—cases in some instances that had failed to respond to conventional methods of treatment. Physicians owe it to their pneumonia patients to inform themselves with respect to the merits and accomplishments of Pnuemonia Phy-Ample literature on the subject is available. cheerfully sent to any practitioner who will address a request for it to Parke, Davis & Co., the manufacturers of Phylacogens, with home offices and laboratories at Detroit, Michigan.

CREOSOTONIC (Scott) is a most excellent systemic antiseptic, and is valuable in tuberculosis, bronchitis, pneumonia, asthma, catarrh and as a tonic after all exhausting diseases.

DYSMENORRHEA:—Thomas George Stevens, M. R. C. P., London, in his text book on "Diseases of Women," states, "when menstural pain is sufficiently severe to interfere with a woman's work or pleasure, even for a short time, it must be dignified by the title, "Dysmenorrhea, and warrants treatment.

In the treatment of Dysmenorrhea, particularly the spasmodic type, H. V. C. has proven of especial service. It exercises an antispasmodic influence and is a sedative without being a narcotic.

Hayden's Viburnum Compound is a product of known composition, and when administered in teaspoonful doses given in hot water, satisfactory results should be manifested.

The prevalency of Dysmenorrhea, and in consideration of the number of women who now earn their living, it is clear how important it must be that they should not be incapacitated for even a few hours during each month, and Hayden's Viburnum Compound administered properly, in conditions where indicated, will afford relief.

The New York Pharmaceutical Company, Bedford Springs, Bedford, Mass., will send samples for clinical demonstration upon request.

MONUMENT IN MEMORY OF S. P. MOORE, M. D., LATE SURGEON GENERAL, C. S. A.:—Extract from report of the Council of the Southern Medical Association, at its eighth annual meeting held at Richmond, Va., November 12, 1914:

"At the Jacksonville meeting of the Southern Medical Association a resolution was adopted endorsing the movement for erection of a monument to the memory of Samuel Preston Moore, Surgeon-General of the Confederate Army. Dr. Lewis, of Washington, has brought to the attention of the Council the desirability of appointment of a committee of the Southern Medical Association to co-operate with the committee from the Virginia State Medical Society to aid in this most commendable effort to perpetuate the memory of one of the South's great physicians.

"The Council recommends that such a committee be appointed. "The report was adopted unanimously."

THE CHOICE OF ALTERATIVES:—So many practical men for so many years have demonstrated the alterative power of *Iodia* (Battle) in those conditions in which alteratives are indicated, that it would seem easily to be first choice among such therapeutic agents.

Clinically, *Iodia* (Battle) has been subjected to the most thorough tests—and shrewd and exacting clinicians continue to use it daily. The conclusion one must reach is that *Iodia* (Battle) is accepted by such men as the first choice among alteratives.

CONVALESCENCE: - After a long and serious illness the functional activity of the digestive tract is always depressed and as a consequence, during convalescence no line of treatment is more urgently required or more positive in its benefits than measures capable of promoting the physiologic efficiency of the digestive organs. Tonics are more or less serviceable, but inasmuch as the profession has in Seng a true digestive secernent, this remedy is the one generally turned to by physicians who are familiar with its exceptional therapeutic value. Under its systematic use the secretory glands of the stomach are gradually restored to their normal activity, and as this takes place, the nutrition of the whole body naturally shows a corresponding improvement. Since convalescence and a return to perfect health are always largely dependent on the restoration of the nutritional equilibrium, it can readily be seen how useful Seng is following an acute illness. Certainly no medical man who has ever tried this effective remedy in the treatment of some weak, debilitated patient and observed the response which the digestive functions make to its tonic influence, will deny to similar patients the benefits he knows it will give.

NERVOUSNESS:-As to the drugs to be given in nervousness, there is only one class which has a specific influence in controlling nervous excitability. This is the bromides, and it has been found that a mixture of several of them is better than one alone. For this reason many physicians prefer Peacock's Bromides, which is a splendidly balanced mixture and which even on prolonged use gives rise to little or no gastric disturbance. The dose must be regulated according to the state of the patient, but when judiciously given there is never any difficulty of controlling even the more severe cases of nervousness. In the more severe forms of neurasthenia, complete rest in bed with small doses of Peacock's Bromides is usually more effective than any other treatment. In epilepsy, which is also a disease in which the brain reactions are exaggerated, larger doses are needed, but as this preparation is more pronounced in effect than other bromides the enormous quantities which are sometimes prescribed are never necessary in order to control the convulsions, and as the digestion is rarely if ever deranged, it can be given for a much longer period of time.

NUCLEO-ENZYMES are the true active and inactive ferments unchanged by heat or chemicals, and *Peptenzyme* represents the digestive secretions of the entire alimentary tract. It must not be confused with the ordinary digestives, but can be used in every case of digestive disturbance with materially beneficial results.

THE MEDICAL PICKWICK is the title of a new journal for medical readers, yet not a medical journal, the first number of which bears date, January, 1915. The magazine is published at Saranac Lake, N. Y., and Dr. Walter M. Brickner is the editor, which fact is a guarantee that the journal will not be lacking in humor. But the aim of the publication is not alone to be humorous, it is to be entertaining as well, to treat of all matters, except scientific, relating to medicine. The January issue is a "dandy," and with such names as Billroth, Coe, Chambers, Garrison, Morris, Ransohoff and others affixed to its sipcy menu, its enjoyable and interesting character is assured. It is a journal large quarto in size, beautifully printed on splendid paper, illustrated, teeming with fun, frolic and philosophy, run by doctors for doctors and their friends, in which to place in imperishable "printer's ink" evidences of literary tenchnique, poetry and satire emanating from medical men. Subscription price, \$2.00 per annum, and well worth it.

WINTER COUGHS AND COLDSS—The severe and often intractable coughs of winter colds too often owe their continuance to systematic weakness. To relieve and overcome them it is essential to raise the vitality and nutrition of the whole body. For this purpose there is no remedy so prompt and reliable in its effects as Gray's Glycerine Tonic Comp. and its easily proven efficiency in affections of the respiratory tract—chronic bronchitis, incipient tuberculosis, asthma, laryngitis and catarrhal disease in general—readily accounts for its widespread use by the profession in this class of ailments.

Its regular systematic administration rapidly restores the nutritional balance and as patients gain in strength and weight usually the most intractable coughs grow less and less and finally disappear.

THERAPEUTIC NIHILISM:—In a very practical paper presented to the Medical Society of Virginia, appearing in the Charlotte Med. Jour., January, 1915, Dr. S. W. Dickson, of Marion, Va., very logically suggests the enormous redundancy and overwhelming multiplicity of the articles in our Materia Medica, and the varying strength of many of the more important remedies prepared by different manufacturing pharmacists, as the important factors in this present day heresy. He concludes his paper with the following terso paragraph:

"With fewer drugs and with more exact knowledge of drug action, knowing what to expect from drugs, and with drugs coming up to a required and expected standard, the results obtained should remove the doubts we all have and cure us of therapeutic nihilism by oftener curing our patients."

ADDITIONAL SUCCESS OF LISTERINE:—In the United States District Court, Southern District of New York, the Lambert Pharmacal Co. secured a decision restraining the Bolton Chemical Corporation from using the name "Listogen," January 11, 1915. The District Judge, Hon. Learned Hand, stating among other points that the name was too much like that of the well known preparation, which from its real merits had become standard. He farther stated that it was calculated to induce substitution of an unknown for a well-known and established product of which, the records showing said the Judge, "that the sales for now many years have been of many millions of bottles, and that it has become an article of very common use in many countries."

MELLIN'S FOOD was the first preparation of maltose and dextrin presented to physicians in serviceable form, and it stands today as a true representation of Liebig's principles which are now so generally applied to scientific infant feeding.

There is a distinct advantage to the physician in the employment of Mellin's Food where a maltose and dextrin product is desired, and we cannot emphasize too strongly the importance of using a product scientifically prepared from carefully selected material and by clean methods if successful results are to be obtained. It is well balanced, easily assimilated and highly nourishing.

THE BOWEIS ARE SECRETORY ORGANS:—It is the failure of the secretory function of the bowel, together with a poor bile secretion, which, in nine cases out of ten, is responsible for constipation.

Most cathartics altogether overlook this factor and address themselves solely to a stimulation of the musculature. Some even inhibit intestinal secretion. The result is a rapid, unsatisfactory bowel movement. followed by paralytic reaction.

Pil. Cascara Comp. Robins is a rational therapeutic formula, which promotes a natural flow of secretions, which is, in turn, the physiologic stimulant of peristalsis. Thus a normal evacuation is produced, without subsequent inhibition.

CITY VIEW SANITARIUM:—Dr. John W. Stevens, physician in charge of this excellent institution, located in the immediate vicinity of Nashville, announces the opening January 1, 1915, of the new fifty room department. With two new buildings, one for each sex, they are prepared to offer accommodations for patients, male and female, far superior to those afforded in the past, and have an institution thoroughly modern and fully equipped in every respect.

THE NUTRITION OF PULMONARY TISSUES:—During the winter and spring months the management of diseases of the bronchi and lungs is one of the most important functions of the physician. The treatment of acute infections must, of course, be largely symptomatic, but it is generally recognized that the best chance of securing results in chronic diseases of the bronchi and lungs is afforded by an agent that supplies nourishment to these tissues, and for such a purpose Cord. Ext. Ol. Morrhuae Comp. (Hagee) will give the utmost satisfaction. It contains the essential qualities of cod liver oil, but is free from its nauseous properties, for which reason it should be selected whenever cod liver oil is indicated.

NERVOUSNESS AND SLEEPLESSNESS:—Business men frequently consult physicians for relief from nervousness which may even prevent rest at night. Usually there are business worries on the minds of such patients. In those cases the physician often times is hard put to choose an agent that will give relief and yet produce no bad effects. However, if he chooses Pasadyne (Daniel) his patient will secure relief from the nervousness, and also refreshing sleep, and without untoward effect, too. Pasadyne (Daniel) is a concentrated tincture of passiflora incarnata. This distinctive name is given it to protect the physician and patient from the substitution of an inferior product.

A sample bottle may be had by addressing the laboratory of John B. Daniel, 34 Wall Street, Atlanta, Ga.

PROFESSIONAL EXPERIENCE and comparative study have proved that there is a "difference," in results, between Antiphlogistine, and its closest imitator. Therefore, physicians should write "Antiphlogistine" to avoid "substitutes." "There's only one Antiphlogistine."

"EGGS IS EGGS":—If you are interested in "hen fruit," and every doctor should be these days, write to Dr. W. O. Sullivan, "R. F. D.," Newbern, Tenn., and negotiate for some of his fine S. C. Buff Orpingtons.

IODINIZED EMULSION (Scott) is an ideal intestinal antiseptic, and is indicated in typhoid and other wasting diseases, dysentery, chronic diarrhea and gastro-intestinal troubles.

THE PRIVATE MATERNITY HOME, located at 4496 LaClede Avenue, St. Louis, Mo., established in 1886, is strictly ethical and well worthy of your consideration. Correspondence promptly attended to.

# Selections

ETIOLOGY AND TREATMENT OF PELLAGRA:—For two and a half years I have made a careful study of intestinal bacteria associated with pellagara, but the intestinal flora and fauna include so many species I have looked with doubt on the pathogenicity of any of them until it is definitely proven. In addition to the colon group of bacteria which are found in feces of pellagrins, I have observed with much interest a bacillus which must be the cause of the disease.

This bacillus is from four to ten microns in length and is more sharpened at the ends than others of the colon group. It develops by spore formation and presents itself in many forms. When spore formation is about to occur a point of cloudiness or an area of bright refraction appears in the protoplasm and the cell generally elongates. The spore enlarges, the cell membrane bursts and the young bacillus emerges through the opening. On first appearance the young bacillus is very active and for a few seconds it is spiral or cork-screw shaped. It gradually elongates and becomes less and less motile. Later it may appear rod-shaped, slightly curved or as a long undulating thread, often suggesting the appearance of a strepto-coccus before sporulation occurs.

In all its forms the bacillus is motile. The different sized cells as well as the bacillus itself have the power of independent motion, and so varied is the appearance of the organism, the microscopist often believes he is dealing with many varieties. It is best studied in a fresh stool, in a warm room, but it is motile in a specimen two weeks old or as long as there is moisture. Morphologic changes, however, are seldom observed except in fresh specimens. The bacillus is aerobic; anaerobic, and is discolored by Gram's and Gabbet's methods of staining. The spores are little affected by these stains.

Daily specimens from a single case of pellagra vary much in appearance. One specimen may show an abundance of spores and very few if any baccilli, while another specimen may reveal a dozen or more bacilli in one field with very few cells. A thin stool placed in an incubator often changes its appearance in forty-eight hours. So numerous are these bacteria in many specimens, they compose five per cent of the solid portion of the excrement and more than seventy-five per cent of all the motile organisms present. Sterile feces afford the best culture medium. They grow well in this medium at a temperature of eighty (80) to ninety (90) degrees.

Animal inoculation experiments have not been very successful. A mild diarrhoea and nervousness was produced by feeding a cat on food contaminated with pure cultures and the bacilli were again observed on microscopic examination. In a man pellagra has been induced by accidental transference of cultures of the bacilli. Pharyngitis and bronchitis developed within three days and was soon followed by definite intestinal and nervous symptoms of pellagra. The pharyngitis and bronchitis subsided in about ten days, but the other symptoms remained until successful treatment was administered. The microscope revealed the organism in its many forms for four weeks.

Of the sixty-four cases of pellagra examined, the bacilli were seen in great numbers. Twenty-one of these have been examined many times and the organism was present in every instance for many months. The organism has not been seen on examination of healthy individuals and those suffering from other diseases.

The bacillus in culture has been tested by many drugs. A one per cent solution of ichthyol seemed to have a most decided effect. I have partially tested this drug on twenty-two cases of pellagra within the last ten weeks. One or two five grain enteric coated pills three or four times a day for three weeks seems to cure the average case. Nearly

all uncomplicated cases consider themselves cured by the tenth day and the bacilli as a rule, disappear by this time, but by stopping the drug this early the bacilli and symptoms return in one-fourth the cases three or four weeks later. From the short experience I have had with the drug I readily conclude, however, that an eight day treatment is of far greater value than a four months' treatment with the arsenic preparations. I have never found a case entirely free of the bacilli after treatment with the latter drug. In the very severe cases suppositories or colonic irrigations are of great value. In so short a time it is impossible to have tested the drug thoroughly, but I regard it as a specific. Just how long the spores will lie dormant in the intestine, time only will prove.

The bacilli in all stages of the disease are present in enormous numbers in the contents of the large intestine. I believe they are usually confined to this situation. Their deleterious effects upon the body appear to be largely due to the production of toxic substances which in addition to serious intestinal irritation or lesion may on absorption incite those systemic disturbances which characterize the toxaemia. The disease must be spread by direct contact with the excrement of those afflicted with the malady or by flies conveying the parasite to articles of food.—
W. B. Page, M. D., of Lumberton, N. C., in Charlotte Med. Jour.

GAS GANGRENE:—All great wars bring their own peculiar medical and surgical problems. The armies of Napoleon contracted trachoma in the Egyptian campaign. Typhoid fever was the chief cause of death in the Spanish-American War. Hospital gangrene was the bane of the surgeons during the Civil War. So far during the present European conflict we have heard comparatively little of diseases as a factor in determining issues. Owing to the high state of development of the medical corps of modern armies it

is not probable that any of the old, time-worn, devastating camp diseases will work great havoc. Cholera, typhoid, smallpox, measles, and pneumonia will possibly claim a small share of the general mortality rate, but increased efficiency in preventive measures will largely eliminate the danger of widespread epidemics from these diseases. It is the new and unknown which hold the greatest possibility of disaster.

Malignant edema has been known as a dangerous disease for many a decade, but the possibility of its appearing in epidemic form has never been discussed in any text books of medicine or surgery. Now it seems that a surgical gangrene closely resembling, if not identical with, malignant edema has broken out among the wounded soldiers of both armies on French and Belgian soil. This peculiar form of surgical complication has received the name of "gas gangrene." It is liable to affect any wound, whether serious or trivial. It has caused so much mortality that it has been made the subject of a special report to the English Secretary of the War Office from the Field Laboratories of the Allies. The report is published in the Lancet for November 28, and from it we learn that the medical corps and field laboratories are busily engaged in efforts to combat the fearful ravages of this complication of the wounds of modern warfare. From the data so far available it appears that "gas gangrene" is always due to a traumatic infection; that is, the projectile carries infected soil into the wound. The nature of this infection is not yet definitely determined in all its details, but sufficient has been learned to make sure that the particular organism belongs to the malignant In other words, it is an anærobic, sporeedema type. forming, gas-producing bacillus. A rapidly fatal gangrene supervenes upon the implantation of the organism in the There is no pus infection except at the edges of the wound, but a dark gray discoloration which subsequently turns green and is accompanied by subcutaneous gas

infiltration, rapidly involves the whole extremity, and within thirty-six hours from the receipt of the injury the process has extended so far that amputation is frequently the only chance of saving the life of the patient. From a perusal of the report it would seem that this alternative is often a very doubtful one, because hand in hand with the extension of the local trouble there goes a cardiac depression so great that death usually occurs in spite of all treatment. Consciousness is preserved till the last. There is no delirium, very little fever, and practically no circulatory acceleration, but the heart becomes so weak that its sounds are scarcely perceptible and the radial pulse disappears entirely. The odor from the gangrenous parts is described as being not only diagnostic but also unbearable. So fearful is this smell that a properly conducted autopsy is almost impossible.

The laceration of the tissues and extravasation of blood caused by the tearing wounds of modern shrapnel seem to produce a most favorable nidus for the growth of anærobic bacteria. Anærobic micro-organisms like those of tetanus and malignant edema find their most favorable habitat in barnyard and cultivated soil.—Medical Record.

A NOTE ON ADRENALIN CHLORIDE IN THE TREATMENT OF SPASMODIC ASTHMA:—In the Lancet of August 15, 1914, Waller states that the following notes may be useful as supplementing Dr. W. Miller's experiences with adrenalin, as related in the Lancet of July 18. Waller has employed hypodermic injections of adrenalin chloride in cases of spasmodic asthma for the last five years, having been led to adopt the treatment by the perusal of an article in an American medical journal. The preparation used has been Parke, Davis & Co.'s solution of 1 in 1000, with 0.5-percent chloretone, in doses of 5 or 6 minims to begin with, never more, and these doses have never been followed by any untoward consequences; on the contrary, the relief

to the patient has invariably been prompt, grateful, and in many instances lasting. The American writer of the above-mentioned article put forward as an additional recommendation the fact that in using adrenalin in this complaint smaller and smaller doses would be found efficacious, instead of increasingly larger administrations as might be expected. This statement has been fully supported in Waller's experience, and even such a minute dose as 1 minim diluted with water has been successful in promptly cutting short an attack in a chronic case.

During the last five years Waller has had opportunity of closely observing the effect of the drug hypodermically administered to a chronic asthmatic, a professional gentleman forty years of age. Until adrenalin was tried in the spasm nothing gave him relief, even morphine itself proving unsatisfactory. The benefit obtained by him is invariably immediate, although Waller can confirm Dr. Miller's observations as to the patient's pallor and the smallness, rapidity, and slight irregularity of the pulse for a few minutes immediately after the injection. The patient's own description of his sensation is that he feels "a little cold and inclined to shiver, somewhat shaky in the knees, and a peculiar empty feeling in the chest." These soon pass off, and the dominant sensations then are a delightful sense of relief from the dyspnea and a desire for sleep. The sleep is always light, refreshing, and dreamless, and Waller has never known it followed by undesirable or unpleasant consequences. This patient has been free of his ailment for weeks and months at a time. Occasionally during a bout Waller has had to give him two injections in the twenty-four hours, but Waller has always been able to decrease the dose, and has never given him more than 6 minims or less than 2. It is now more than six months since the patient has had the slightest return of his trouble, or has received or required an injection.

Waller is aware that the continuous administration of large doses of suprarenal extract is followed in animals by arterio-sclerotic changes; but the amount of the gland extract injected in the above doses being so infinitesimal this objection cannot, he thinks, be urged against its employment in asthma. Waller has always injected the preparation subcutaneously, never intravenously, and he has never found that any benefit was to be obtained by even quite large doses given by the mouth.—Therapeutic Gazette.

HEALTH IN OUR ARMY:—The report of the Surgeon-General of the Army for 1914 is a document of unusual The outline of the report in the letter of transmissal states that the non-effective rate for disease for 1913 (the calendar year covered by the report) is 23.97 a thousand, the lowest rate ever recorded for our army. This rate indicates the average number of men in every thousand incapacitated for duty each day during the year. The death rate for disease was 2.57, the total number of deaths being 397, 40 of which were from tuberculosis, 23 from pneumonia, 17 from nephritis and 15 from organic heart disease. Probably the most interesting portion of the report is that dealing with the control of preventable diseases. The record made in our army in the obliteration of typhoid fever has become a subject of world-wide comment among military and sanitary authorities. Only three cases of typhoid fever occurred in the army during 1913; two were in recently enlisted recruits who were admitted to the hospital with the disease inside of the first six days of service, while in the third case, only partial immunity through vaccination had been established. All three of these patients recovered. By way of contrast, the report states that in 1912, there were 18 cases with 3 deaths; in 1911, 44 cases with 6 deaths; in 1910, 142 cases and 10 deaths, and in 1909, 173 cases with 16 deaths.

all the troops scattered along the Mexican border and in large camps in Texas, not a single case of typhoid has occurred in an inoculated man since June 4, 1912. means that typhoid fever as a military disease, as an accompaniment of military service and camp life, is practically a thing of the past. Only those familiar with the awful ravages of this deases in all previous wars under all conditions in which large numbers of men were herded together under unfavorable conditions can appreciate the enormous economic and military value of this fact. report is full of interesting data, so numerous as to make it possible to refer only to the most interesting. The medical department of the army, June 30, 1914, consisted of 426 medical officers, 91 reserve officers, 16 contract surgeons, 28 commission dental surgeons, and 39 contract dental surgeons. The remainder of the 5,044 persons connected with the department were army nurses and members of the hospital corps. Of the 19 candidates who had passed the preliminary examination for appointment to the medical corps, 17 successfully completed the course of instruction in the army medical school and 16 were recommended for commissions. The library of the Surgeon-General's office contained on June 30, 1914, 219,494 volumes and 330,320 pamphlets on medical and surgical subiects. The army medical museum contains 47.120 speci-Reports from the various hospitals, laboratories, mens. territories and provinces are all of great interest and impress the reader with he wide range and scientific thoroughness of the work done by our army medical corps.-Jour. A. M. A., Jan. 9, 1915.

FOR GASTRIC ULCER:—In gastric and duodenal ulcers one ounce doses of olive oil, morning and evening, have a good effect. A useful powder, given three times a day, one-half hour before meals, is composed of calcined magnesia.—Critic and Guide.

LICENSE TO PRACTICE MEDICINE THROUGHOUT THE UNITED STATES:—We have been requested by a number of our subscribers, particularly from the Western and Southern States, to take up the agitation for a universal license, that is that a man licensed to practice medicine in one state of the Union should have the right to practice throughout the United States.

The idea is an excellent one, and no doubt at some future date it will become a fact. It is in the highest degree absurd that a man who is considered competent to treat and operate upon people in New York City should become criminally liable for doing the same thing after crossing the ferry to Jersey, and vice versa. It is in the highest degree absurd, not to use a stronger term, that a man who has been practicing for ten or twenty or more years in one state, showing his competence and good moral character, should on moving to another state be forced to pass an examination in all the preliminary branches such as anatomy, physiology, chemistry, etc. The thing is absurd and anomalous, and pointing out the anomaly and advocating a saner attitude is work which should be taken up by all medical journals.

Still, we feel that any hope for immediate reforms in this respect are premature. The sovereignty of our individual states, and the undeniable fact that in some states the requirements for the practice of medicine are much lower than in other states, will be in the way. But it is a reform badly needed. It is important that when a physician has his properly attained medical degree he should feel that he has a right to practice in any corner in the United States and its dependencies. There is no other country in the world in which such a condition of affairs obtains. The German diploma is good throughout Germany—in fact, it is even accepted in Austria-Hungary and Switzerland. The same should be true in the United States.—Critic and Guide.

IS CONTINENCE INJURIOUS?—This question is still being discussed assiduously. We are interested in the truth and do not think that anything ought to be conceded to prudish-It is our conviction that continence is injurious to many people. But many things have to be accepted and practiced in matter of fact ways that are injurious. It is injurious to break one's rest, but the physician must leave his bed when the call comes; we don't think about or cry over the physiological damage that results. If by the practice of continence we succeed in not blasting the happiness or impairing the social status of other individuals we ought to be able to stand for the injury. These things are all part Illicit sexual indulgence nearly always of a decent life. spells sexual exploitation, and it is a poor sophistry which attempts ever to justify the latter. Nothing is gained for the cause of the higher morality by insisting in these matters that black is white. It is immoral not to deal with facts honestly, and ineffective practically, the very object sought being nullified.

Suppose continence is injurious to certain people. Well, what of it? It is not the only sacrifice, not the most important cross that we have to bear. The true morality should be taught according to the principles laid down by Talmey. Do no injury to others, at no matter what cost to ourselves.—N. Y. Med. Times.

OIL OF GAULTHERIUM:—The oil, chemically, consists 90 parts of salicylate of menthyl, and 10 parts of terebene. Taken undiluted it produces considerable heat in the fauces, esophagus, and stomach, followed by some nausea. It is splendidly absorbed, and is excreted principally by the kidneys, to the secretion of which it imparts its characteristic odor. It is partly eliminated by the lungs and skin. To the stomach it acts as a stimulant, and in large doses causes nausea and vomiting. It is a powerful antiseptic, and 1 part to 200, to urine, has been known to preserve it for

eighteen days. Urine voided an hour after taking 20 drops remained perfectly free from putrefaction for twelve days, while the urine voided before the salicylate of menthol was taken became putrid and ammoniacal in a few days.

On account of this property, it is serviceable in cystitis, especially of the chronic form, and acts well in chronic bronchitis, in acute and chronic rheumatism, and as a diuretic in cardiac, renal, and hepatic dropsies.

It combines well with digitalis and other diuretics. However, it should not be relied on as a diuretic to the exclusion of other drugs.—Medical Brief.

THE FIELD FOR RADIUM:—All forms of cancer which affect the surface of the body, no matter what their situation may be, offer the most attractive opportunities for treatment by radium, says Mackenzie (Northwest Med.). An epithelial cancer situated at the angle of the eye, the ala or bridge of the nose, or at the angle of the mouth, which are common situations, there being no metatastic deposit, yield promptly to radium without leaving any disfiguring scar behind. Under the same conditions the surgeon's knife would mutilate and disfigure.

Radium possesses a very striking action upon new growths or ulcers which are caused by tuberculosis, and very wonderful results are obtained even in cases in which the lymphatic glands become the seat of this process. The Germans have very strongly advocated the constitutional treatment of tuberculosis in all cases where the disease is local, in association with X-ray therapy.

ASTHMA:—M. Segard recommends the administration during the attack of the following:

R Theobromine, Gm. 0.2.

Valerianate of caffeine, Gm. 0.05.

This should be given in a cachet, two to four times a day.—Med. Record.

A NEW REACTION FOR SYPHILIS:—Landau (Wien. klin. Wochenschr., No. 42, 1913). The reagent consists of 5 drops of tincture of iodine in 50 c.c. white paraffine oil. This mixture must always be freshly prepared. The indicator is a clear solution of boiled potato starch. Of the blood-serum, obtained in the usual manner, 0.2 c.cm. are placed in a narrow test-tube, 2.5 c.cm. of the reagent are added and the mixture thoroughly shaken until nearly de-The tube is then closed with a rubber stopper and left lying flat, in a dark place, at room temperature, for two to four hours, after which a few drops of the starch solution are added. Normal sera take on a deep blue color; syphilitic sera remain unchanged. The reaction is apparently due to the presence in syphilitic serum of substances, perhaps fatty acids, that have a strong affinity for iodine, but only in the presence of a lipoid like paraffine. In seventy-seven cases of syphilis, of all kinds, the iodine reaction was positive in sixty-eight, the Wasserman test is only forty-seven. All non-syphilitic cases were negative with both tests.—Buffalo Medical Journal. December, 1914.

TREATMENT OF PRURITUS ANI:—Two remedies for the treatment of pruritus ani, both said to be effective, are suggested by Cropper. The first of these is tincture of iodine (B. P.), which may be used in one-half or full strength. It is painted over the mucous membrane of the affected area, usually about three times a week. Care should be taken not to except the skin.

The other remedy is a compound tincture of benzoin. This is said to be even more effective than the iodine, and it is cleanly and does not soil the linen. It may be used twice or thrice daily and it never irritates. Within two minutes after the application, the spirit in the tincture evaporates, and then all temptation to scratch the part disappears.—British Med. Jour. Hospital Bulletin.

THE HEMOSTATIC ACTION OF EMETINE:—Another illustration of the striking action of emetine, in arresting hemorrage, has been reported by Palasne and Champeaux to Bertrand (Bull. d l'Acad. d Med., April 14, 1914.) In this case, there was vomiting of blood, owing to a duodenal ulcer. The bleeding was promptly arrested by a single hypodermic injection of 2-3 grain of emetine hydrochloride. In a case of hemothorax, the result of a penetrating wound of the chest, the injection of 2-3 grain of the emetine, repeated once daily for six days, seemed to control the symptom.

Bertrand again points out the futility of trying to explain the hemostatic effect of emetine through circulatory depression, revulsion or induction of nausea. As yet no completely satisfactory means of explaining just why the emetine stops bleeding has been supplied by anyone; still, that it does do so, and that quickly, there is now an abundance of evidence to demonstrate.—Clinical Medicine.

"DONT'S" IN THE TREATMENT OF INSOMNIA:-H. Crichton Miller emphasizes three points in the treatment of insomnia: (1) Never let the insomniac drug himself. Never let him know what he is getting or how much. is necessary, so that the physician or nurse can adjust the dose without the knowledge of the patient. (3) Never under any circumstances allow the patient to go to sleep with the hypnotic by his bedside, with the idea that he will not take it unless he needs to. It means that the patient's mind is started on a train of speculation as to whether he will or will not need the drug, even after the light is out and conditions are favorable for sleep. patient will probably say: "I will not take it now: I will wait another half hour." The upshot of this is that the wretched patient gets five hours' sleep instead of eight. because during three hours the draught was in the bottle instead of in his stomach.—Medical Press and Circular.

CHIONANTHUS:—The liquid representatives of chionanthus virginica, or fringe-tree, are prepared from the bark of the root. I cannot understand why this remedy has not come into more general use by the entire profession. I am sure that my experience with chionanthus in jaundice of every form has been confirmed by many other prescribers. Certain it is that there has been no case of jaundice, whatever its cause, in which I have not seen some little effect from it, while I have cured so many cases of simple obstruction of the ducts and of functional disorders of the liver, and had so very few failures, that I am convinced that, if there ever is to be a specific for jaundice, we shall find it in chionanthus.—Clinical Medicine.

INCOMPATIBILITY OF ADRENALIN AND CHLOROFORM:—Surgeons should always inform the anesthetist when they are going to use adrenalin. The anesthetist may be using chloroform, and chloroform with adrenalin is a very dangerous combination. The weakened heart-action from the chloroform, and the contraction of the arterioles from the adrenalin, cause an obstacle that the heart in its embarrassed condition cannot overcome, and a fatality sometimes occurs. Hornabrook especially warns against pluging the nostrils with adrenalin and cocaine, and then following with chloroform as a general anesthetic. Adrenalin can, however, be used with ether.—Critic and Guide.

SODIUM FLUORIDE FOR INSECTS:—Means, Passed Assistant Surgeon U. S. S. Cincinnati, states that at one time the storerooms and pantries became infested with roaches, and the ordinary insect powders seemed to have no effect on them. Sodium fluoride was then used with marked result. Not only were the roaches killed, but also the ordinary black-beetle that is found with the roaches.—U. S. Naval Medical Bulletin, July, 1914.

# THE SOUTHERN PRACTITIONER

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# Priginal Communications.

BUBONIC PLAGUE IN NEW ORLEANS 1914-15. GEO. H. TICHENOR, JR., A.B., M.D. (Tulane)

Associate-Editor, Official Journal American Association of Progressive Medicine; Former Medical Inspector and Yellow Fever Expert in "Charge" Louisiana State Board of Health; Nominee of Nicaraguan Minister to United States for Yellow Fever Institute; and Representative of the American Association of Progressive Medicine in Investigating Plague in New Orleans, etc.; Former Member American Historical Association.

The shadow of coming events was seen by four states, according to the Louisiana State Board of Health's report:

"The presence of Bubonic Plague in Havana in the summer of 1912 made imperative practical measures for protection. Assured that one state alone can not cope with the problem, Boards of Health of all the Southern States were invited to hold a Plague Conference in New Orleans. Four States sent representatives. Information gained from a visit to Havana relative to conditions and measures was outlined; a plan of concerted action was agreed upon and the resolutions adopted covering the situation were widely published. It cannot be too strongly urged that all city and State officials give heed to the measures, which in the

judgment of the Congress were considered necessary to immunity from this disease."

However, prior to that:

"In 1911, a cursory sanitary survey was made of New Orleans. Very insanitary conditions in good supply places and in public service were noted. The markets in construction, equipment and upkeep were deplorably bad.

"A review of these conditions was sent the Mayor August, 1911, and remedial measures recommended. The market situation as being a positive meance to the health of the people was stressed and immediate improvement asked for."

In justice to all parties concerned, it should be known that New Orleans is the only city in the State which employs a whole-time health officer; the total amount available for the work of the city is an appropriation of \$56,683.13, additional revenue \$45,664.24, total \$102,347.37. (Report 1913.)

There is no sanitary protection, nor sanitary progress in Louisiana; therefore, the State was not prepared to fight the plague. In 46 per cent of incorporated communities no systematic work is done, no accurate records are kept, and no reports made to the State Department, with few exceptions.

"There are in the State 195 incorporated communities. Of these 156 sent replies to questionaire. The records show 104 having duly qualified health boards. In 73 of these no salary is attached. Where there is compensation, the amounts are from \$50 to \$720 annually, average \$191 a year. In 37 there are appropriations; these range from \$50 to \$2,500. Omitting Alexandria and Lafayette (Shreveport, Baton Rouge and Monroe reports were not received), which appropriated each \$2,500, the average annual appropriation is \$310.00. In 10 communities there are additional revenues, fines, etc. Only 38 have sanitary inspection."

The lack of funds hampered both State and City Boards of Health in instituting a rat crusade, when danger presented itself at its door. According to a formal resolution recommended last year by the Louisiana State Medical Society and from its Journal (*Pan-American Surgical and Medical*), I quote the following, which is self-explanatory:

"Lack of funds hampers both the State and City Boards of Health in instituting a rat crusade. In the last analysis, any anti-rat campaign, especially in a city where the rodents have invaded every precinct, will prove ineffective so long as garbage remains uncovered, stables, granaries, warehouses, markets, etc., remain unratproofed. It would need the great fire of London to clean up some of the rookeries; sixteen miles of wooden wharfage serves as a harbor for these pests, hence advantage should be taken of the high stage of the river to institute a vigorous campaign when the waters force them inland. This was recommended last year by formal resolution of this society. Rats must be starved into submission before they can be induced to enter traps and eat poisoned bait, so it is a question of educating the public. When the individual unit is clean, the community aggregating of units will be clean, hence the necessity of educating the delinquent citizen, who leaves food supplies open to rat visitation. I fear it will require, in the future as in the past, an epidemic visitation to arouse the people to their duty in the premises.

"The main object of the Sunday Symposium on the Relation of Religion to Hygiene and Preventive Medicine, held at the Crescent Theater on the 17th of April, was primarily directed to this problem of municipal cleanliness and rat extermination, both as an economic and health necessity, and a religious duty. The annual loss from rats in what they eat and destroy far exceeds the cost of their extermination; the cost of an invasion of bubonic plague is incalculable. San Francisco expended millions of state and federal money, and still the bacillus pestis lingers in the ground squirrels of the rural districts. It was thought that the co-operation of the clergy of all denominations would have had an influence in quarters where neither the medico, the lawgiver, nor the financiers would have influence."

In order to meet the demands of the times, the Louisiana State Legislature enacted a law authorizing the Governor to raise \$150,000.00, as the State contribution to this

fight. But the State is not unwilling, the Governor is quoted as saying,, to do her full share, as has been demonstrated by his contributing \$10,000.

"Whether funds will be secured depends upon conditions, and those are that the State is not going to contribute money to create any new jobs or keep political henchmen employed."—Daily States, Aug. 22, 1914.

Dr. Rucker, or his Federal associates, did the employing, as the State and city subordinated their authority to these gentlemen.

This seems to have been the first visible evidence of the shaking of the foundation of the people's faith in the United States Public Health Service.

In commenting, the Pan-American Journal states:

"The immediate effect of this form of 'policy' is to create the impression in the minds of our sister States that we are trifling, by the injection of politics, with a situation which affects them vitally as it does ourselves."

This policy, together with the very few cases of plague, the general filthy condition of the city, and the prompt disappearance of the plague in human subjects, when no large appropriation was forthcoming are the causes which I consider leading to the organization of the Citizens' and Taxpayers' Association with the object not

"to oppose any wise regulations for the conservation of public health, that the organization stood for any cause which was for the best interests of the people, but its object was to protect property holders against stringent and unnecessary measures, calculated to make them spend thousands of dollars uselessly. It also protects its members, who, for sufficient reasons, cannot make improvements within the time allowed by the government officials, and are haled before the courts for prosecution."

The stringent and probable indefinite notices, which would cause continual repairs, sent to property holders and disregard to city filth, probably caused the remarks of its attorney:

"New Orleans is circled by huge dump piles of trash and filth, an admitted breeding place for rats. If otherwise innocent and inoffensive citizens of this city are sent to jail for failure, through financial inability or other good reasons, to comply with the stringent ratproofing regulations, then the city administration is just as culpable and should be jailed for their failure to keep the municipal house clean," said Mr. H. P. Dart, Sr., in an address to the Citizens' and Taxpayers' Association Thursday night.

The outcome of the work of this association, according to Mr. Dart's remarks in the *New Orleans American*, January 8, 1915, are:

"They are not now arresting people for failure to raise their houses when one foot above the ground; they have given up demanding the chain-walling of the whole house and are satisfied with one room. The officers in charge of the work, who at first were so exact and arbitrary, now seem to think the original laws were hardships.

### NOT A GOOD DEFENSE.

"The city has raised the streets and the property holder's taxes, why shouldn't they raise his house? I suppose if city officials were asked why they did not remove the huge disease-breeding dump piles they would answer they did not have the money. If that is a good defense for the city failing to keep its house clean, then why isn't it a good defense for its citizens?

"Rats come in on ships from foreign countries." Dock Board has not spent a dime for ratproofing, to keep these imported rodents from entering your cleaned-up prem-They say in October, 1915, they are going to 'begin' to ratproof Toulouse Street wharf. That's only a small section of the river front. Why should we put our house in order to receive these river rats? And they are catching infected rats on the docks now. I think the Supreme Court will decide that the citizens of New Orleans should be allowed as much time in which to do their ratproofing as the city. It will decide, I believe, that the citizens should not be required to do a duty which the city shirks. are told that the whole matter is up to Dr. Rucker how the work shall be done. Dr. Rucker is a splendid fellow; he has a heart and soul, but he's an autocrat—a 'good' auto-The Constitution does not allow a one-man boss.

Any one man must be divine to make no mistakes. The Mayor, Board of Health and police count for nothing—the laws of the State of Louisiana were passed to protect its citizens."

The death of thirty people, who are supposed to have died of bubonic plague, eighteen males and twelve females, seems to have made little impression on the local public as well as the felicitations at the banquet of United States Health and city officials on cleaning up the city, if we accept newspapers as an authority on the subject:

"Of course no one can fail to see how much cleaner the city is now."

I have atttempted so far to be impartial and give both sides of this question, and will now give you the author's views. Remember, that it has not been many "moons" passed that we observed in New Orleans the ridiculous situation of the United States Public Health Service insisting that the "Belgian girl" had trachoma, and local physicians of repute denying same with equal equanimity of opinion.

Continual observations up to the present in regard to the extensive dumping grounds in the heart of the city, where refuse of all descriptions are hauled during the day and piled in great heaps, while negroes, buzzards and beggars regale themselves in looking for desired treasures lends a brilliant scene of contrast to the stupidity of the numerous ratproof dwellings of working men closely surrounding this beautiful spot. It is doubtful that the beggar of Bagdad ever viewed such filth or subjected himself to such criminal unsanitary surroundings. I am told (by irresponsible persons) that the refuse is burned at night. If it is. it has made the same impression on appearances as simple Simon made when he bailed out the ocean with a teaspoon. I suppose I should not visit such forbidden places so frequently and adapt the Golden Rule of Confucius: "I see no evil, hear no evil, and speak no evil." "Stop knocking and boost the town." So I must pass on to dwellings most

pleasantly located with cement business floors and sleeping apartments a few feet above the marshy ground, always below the zone of excessive moisture (my experiments showed same to be from ten to twelve feet from surface level), where I find consumption, rheumatism, catarrh, etc. -always la grippe, as frequent as unpaid bills and invalidism. Is this a casual observation? Can you prove same by applying the accepted facts of modern sanitary science? Yes, even by old theories; in fact, I know of no authority who would advocate such stupidity in regard to dwellings and cement floors for business places. Already I have found a general complaint on inquiry all over the city in regard to cement floors (have no interest either in cement companies or lumber mills). What do some of the accepted authorities say concerning favorable conditions for germ activity, purity of air, foundations for buildings, soil conditions and effects of dust and filth?

Burdon Sanderson avers that the influence of environment on organisms, such as bacteria, is so great that it seems as if it were paramount ("Lectures on the Relation of Micro-Organisms to Disease," 1883). "The air supply desirable may be put there at thirty-two cubic feet per head per minute or twenty-eight cubic feet per second for the whole. The evil effects of insufficient ventilation are manifested in diseases of the respiratory organs acute and chronic." Billings. What chances with cement floors and four walls with insufficient openings?

Legality—decision of Mansfield, in the case of Rex. vs. White. "It is not necessary the smell be unwholesome. It is enough that if it renders the enjoyment of life unwholesome," often quoted approvingly by jurists. This decision certainly covers the ground regarding the public and private dumps.

Influence of climate in causing disease was well known for over two thousand years (see Pepper). "Residence on a damp soil has a tendency to produce diseases of the lungs.

especially phthisis. Soil moisture is also an important factor in the development of periodical fevers." Pepper. "System of Medicine."

"The influence of the rise and fall of the soil water in typhoid fever upon which so much stress is laid by Pettenkofer and others, no doubt, exists. Level of sub-soil water should be at least five feet below the foundations." (Usually my observations here, three feet, increased with drainage.) Do not forget cement abosorbs moisture. Furthermore, our drainage system is not complete.

Well, you must not stay in doors—fresh air, but dodge the department wagons and dust, and the numerous dumps, city and private. Why? "Pathogenic organisms may adhere to minute particles of dust and be wafted quite a distance by gentle currents of air, and this increases the danger zone. No doubt most of the dried organisms are dead. but some kinds may live in a virulent condition for a long time, as we have proved in the case of tubercle bacilli and smallpox. These can also be transferred on fabrics or merchandise, and to this extent the old idea of fomites is still held, though no one thinks of it in the mystical way we once thought of the transfer of cholera, plague, and yellow fever in a ship's cargo. Similarly moist germs can be carried adhering to drinking cups, as proved in the case of syphillis, or on lead pencils passed from mouth to mouth of children as in the case of diphtheria carriers. The above as well as the transfer of typhoid and other bacilli in food or water, constitute the modern idea of fomites. then may act as the carrier of these germs which can stand drying, promptly die when dessicated."-American Medicine, New York, 1914.

Again, we must consider the maggots of the typhoid or house fly that have a habit of migrating from their breeding places into drier portions of manure heaps. This is such an important question that the Department of Agriculture at present is trying to devise a maggot trap as a possible solution of the fly problem. The school boy knows how flies carry disease.

You perceive, then, that conditions here are not the same as in other places. If New Orleans had been raised by the early colonists, as Chicago, fifteen feet, some of the accepted regulations might be applicable to this locality, and if filth was buried in order to elevate marshy places, the public would have no objections. Then, again, if the authorities had presented the matter as Philadelphia, in the present financial stringency, there probably would have been less antagonism. The text of their circular was as follows:

"Ratproofiing of Buildings is a Cheap Form of Insurance Against Fire and Pestilence," and the circulars are given a large distribution. The charges against house rodents are serious ones. They destroy directly millions of dollars a year in property, including goods and buildings, and have always been deemed an important factor in the starting of fires. They are known to be an active agent in the spreading of some infectious diseases. The plague would die out but for the rodents, which have been proved to harbor fleas that carry the germs, and in many places, without question there are colonies of rats infected and ready to spread the disease. Outbreaks occasionally at English ports bear testimony to this fact. America has merely been fortunate. Rats are further subject to a leprosy which resembles closely that of man, and a number of other diseases in the rat are probably injurious to the humans who catch them. The creatures are also subject to internal parasites like the trichina; some authorities are of the opinion that this infection will not be exterminated until the houses are rid of their rats and mice. Then there are the external parasites, all disagreeable insects, which are glad to leave the rats and home themselves on man whenever the opportunity offers. Then, again, the rat is very uncleanly in its habits. It goes into the sewers and filth of all kinds and brings more or less of this into the house."

Then, too, there seems to be a prevalent notion that other cities have exaggerated and profited by New Orleans' misfortune, which does not appear to me to be the case. The *Medical Standard* of Chicago commenting, states:



### "PLAGUE IN NEW ORLEANS.

"Four deaths have occurred from bubonic plague in New Orleans. Happily the presence of the disease was recognized before it had spread and we have every reason to hope that it will not become epidemic. In our Public Health Service we have probably the ablest corps of disease-fighters in the world, and among the officers are a number of men who have already had extensive experience in coping with the disease in San Francisco, Porto Rico and Havana. There will be no loss of time and no lost motions in New Orleans.

"The great problem in plague is the problem of the rat. While other animals may serve as carriers for the infected flea, whose bite transmits the disease, this rodent is the animal most to be feared, at least in this country, although in California it was shown that the ground squirrel might (and did) serve as a carrier. When the terrible epidemic of pnuemonic plague, with its 100 per cent of deaths, devastated Manchuria a few years ago it was the ptarmigan upon which the plague-infected fleas fed before biting their victims. But in New Orleans the rat is the animal which must be fought, and already a war of extermination against this foul creature is on."

All observers, at present agree that the plague in some manner is not infrequently transported by rats. It seems probable that the fleas, which are commonly on the rats, aid in spreading the disease. "In a few cases, proof has been forthcoming that persons have contracted plague from bites of rats." *Progressive Medicine*, 1900 Series.

The disease is classified among specific diseases, owing to the finding of the bacillus in 1894 by Yersin, etc. Liebermeister classified it as a contagious-miasmic disease. Whilst present views as to the causation of the specific diseases compels us to assume a specific infecting principle as the real cause of every outbreak of the plague, there are certain circumstances which are recognized as so favoring the development and action of that principle that they have come to be looked upon as indirect or auxilliary causes—rather strictly speaking, predisposing influences.

All observers of recent epidemics unite in ascribing poverty the foremost rank; neglect of sanitary laws; overcrowding and ill-ventilation; personal filthiness; improper or insufficient diet; indifference as to location of dwellings and their surroudings; accumulation of filth in or around houses; imperfectly buried corpses.

Diagnosis: "The difficulties attending the recognition of the plague at the beginning of an outbreak speedily subside, the rapid spread of the disease, its frightful mortality, the overwhelming intensity of the symptoms, the prompt occurrence of cases characterized by buboes, carbuncles, or petechiæ are collectively considered diagnostic of this disease and no other disease whatever." Wilson. However, it has been mistaken for lymphadenitis, syphilitic buboes, parotitis, etc.

It happened that an old case of syphilis on a steamer from South Africa, at the time the disease was prevalent there, was diagnosed plague at quarantine in this State not so many years ago, to my personal knowledge.

I do not consider this such an unpardonable sin, although disastrous in its results, as concerning its clinical course, little is accurately known, and of the complications, still less—the mortality being greater than any other epidemic disease, it naturally causes popular commotion. "Dampness, and particularly a thoroughly wet soil, are favorable to the development and spread of the disease." (Pepper.)

The New Orleans 1914-15 epidemic differs from all others in that it has had every advantage accepted by authorities for its spread from the beginning to the end of human infection and even at present, considering that ratproofing has only been partially done, and yet it was wiped out.

Probably you may say every one is immune. No, this is one serum which is not popular. Neither Yersin serum nor any other serum is now used for prevention of plague.

No sufficiently extensive observations have been made upon man immunized against plague by vaccination to

determine absolutely the duration of immunity that results from vaccination—it is not practical. Extensive experiments upon rats, by the Indian Plague Commission, have been made by vaccination and subsequently innoculation with living plague germs.

What are then the lessons we may learn from this epidemic?

First, the need of specially qualified health officers in every State—not Boards of Medical politicians. Other States have seen this necessity.

J. A. Ferrell states (Public Health Work as a Carrer), "that there are already more positions open for trained health officers than can be satisfactorily filled. mand is increasing all the time. It comes from federal. State and city health departments; from the International Health Commission and similar quasi-public health agencies; from the schools, and more recently from rural coun-The medical inspection of schools has made rapid strides in the last year or two in both city and country. Twenty-one States now have medical inspection laws, ten of which are mandatory, while in many of those States without special laws on the subject, individual cities have inaugurated medical inspection systems. The medical inspection work is more and more being centered about the whole-time health officer. Maryland is looking for men to fill positions created by the sanitary district bill passed at the last Legislature. New York State is in the market for a large number of trained health officers. North Carolina employs eleven whole-time county health officers at salaries that attract capable men irrespective of residence. Sooner or later all the States will exert that control over hygienic and sanitary conditions which a few now exert, and this will mean an ever-increasing demand for public health officers to give their entire time to the community. Already some educational institutions are coming forward with special courses to train men for the new work. The 'School for Health Officers' of Harvard is sufficiently well known, and at least five American universities—Harvard, Pennsylvania, Michigan, Wisconsin and Tulane—now grant the degree of doctor of public health for special public health work over and above the requirements for the regular medical degree."—The Medical Record, New York.

Secondly, we must earnestly work for the day when we shall have arrived at that point in science where the chemist can trace with equal facility the chemical action in fermentation, putrefaction, suppuration, infection and contagion, as the microscopist when he shall have discovered the causative, and indispensable minute organisms to all these processes. In other words, we must be able to explain Sternberg's observations with the inoculation of animals with the saliva, proving that even when taken from perfectly healthy men, this may be fatally poisonous to animals.

Then, and only then, will medical jurisprudence be what it should be. That we are progressing along a line at an incommensurable ratio, no scientists doubt.

"The discovery of Neptune, the planet of the solar system, as the result of mathematical calculation before it was ever seen, has always been regarded as one of the great triumphs of scientific inference. This is hardly more remarkable, however, than discoveries recently made concerning the existence of life which is too minute to be seen even with the highest power microscopes used today. a period of thirty or forty years microscopists have been mostly occupied with studying the causes of diseases of men and animals, and a large number of these diseases have been investigated and their causes known. these have been found to be caused by bacteria and others by microscopical animal life known as protozoa, but there have been some diseases which have hitherto baffled observation, no organisms being found which could be regarded as their cause. Perhaps the most widely known of these diseases is yellow fever, but there are several others of perhaps lesser importance, like the foot and mouth disease, infantile paralysis, etc. The extensive study and experiment given to these diseases have seemed to demonstrate. so far as logic can demonstrate, the fact that they must be produced by organisms which are invisible to the microscope.

"In the case of yellow fever, for example, while it is known the disease is distributed by the mosquito, there has been no success attending the attempts to find the tiny organism which may be the cause of the disease. Infectious material can be obtained, and this may be filtered through filters made of porcelain so fine that no particles that are large enough to be seen with the highest power microscope are capable of passing through them. Nevertheless, the filtrate that passes through the filter is found to be as violent in its action and as quickly capable of producing yellow fever as the unfiltered material that has been thus treated. Whatever there may be in the way of living organisms in such a filtrate is too small to be seen, since the microscope discloses absolutely nothing. The behavior of such filtrates, however, demonstrates that they must contain living organisms. Not only are they found to be capable of producing disease, but the virulent matter in them, which produces disease, is found by experiment to increase in amount as the result of keeping material under conditions in which the micro-organisms can grow. Since the only thing that can increase the amount under these circumstances must be regarded as living, and since this increase must be due to growth, the conclusion is absolutely clear that the filtrate must contain living particles too small to be seen.

"The discovery of organisms that are invisible has created a new field for scientific research and already many interesting facts are being disclosed. In a few cases, by using the data thus obtained and using new microscopic methods there have been found microscopic evidences of excessively minute particles which may possibly be the living particles which are concerned. These are so small that in some cases possibly 150,000 of them placed side by side would only reach the length of an inch, their size being practically beyond the limit of microscopic observation, under the most favorable circumstances. Further study has seemed to show that in some cases these minute organisms represent a certain stage in the life of a parasite. Other stages of which are of a larger size, easily capable of being seen. What practical results may come out of investigations in this new field it is too early to say. Past history, however, has shown that as soon as we have discovered the cause of a disease, we are quickly able to devise practical methods of fighting it. We may, therefore, anticipate that in the not distant future the disclosure of these invisible organisms and the study of the conditions under which they live may give us effective means of attacking diseases that have hitherto baffled us. While these discoveries have not been the result of mathematical calculation, as was the discovery of Neptune, they have just as truly been the result of logical inference, from experiment and observation, and they must be regarded, therefore, as an extreme triumph of human logic."

Finally, if plague is to be prevented from entering this country, there must be: first, a most careful search made for modified cases of plague for some considerable time after the disease has apparently died out in places that have been attacked by it; second, rigid inspection of vessels and passengers coming from infected places, disinfection with sulphur (which had formerly protected this State for years), "Holt System;" third, a sharp lookout kept for increased mortality among rats and extermination of same.

In closing, the reader must remember that New Orleans is blessed with soil impregnated with salt from the Gulf and even its waters sometimes extend up the Mississippi as far as the city, which, we all know, is a purifier; therefore, the generally good health. As even the levee protecting the city has been known to slide into the river, ratproofing of the extensive wharf will try the skill of the most expert sanitary engineers.

We are going to make the city clean—it's healthy notwithstanding its disadvantages.

A POWDER FOR URTICARIA:—The following is recommended as an effective antipruritic:

B. Menthol, 0.20 gram.
 Camphor, 1 Gram.
 Magnesium carbonate.
 Zinc oxide, aa, 40 grams.
 Pulverized talc, 20 grams.

-Journal de Med. et de Chir. Pratiques.

# Editorial.

## LAW AND REGULATIONS.

## RELATING TO THE

Production, Importation, Manufacture, Compounding, Sale, Dispensing, or Giving Away of Opium or Coca Leaves, their Salts, Derivatives, or Preparations.

The following official copy of the "Anti-Narcotic" or "Harrison Law" issued by the U. S. Treasury Department January 15, ult., was received too late for insertion in our last month's issue, we place before our readers in full, with the suggestion that all practicing physicians who have not done so, immediately make application by letter or in person to their respective Internal Revenue Collectors or Deputy Collectors for registration.

TREASURY DEPARTMENT,
OFFICE OF COMMISSIONER OF INTERNAL REVENUE,
Washington. D. C., January 15, 1915.

### THE LAW.

By an act of Congress approved December 17, 1914, it is provided: That on and after the first day of March, nineteen hundred and fifteen, every person who produces, imports, manufactures, compounds, deals in, dispenses, sells, distributes, or gives away opium or coca leaves or any compound, manufacture, salt, derivative, or preparation thereof, shall register with the collector of internal revenue of the district his name or style, place of business, and place or places where such business is to be carried on: Provided. That the office, or if none, then the residence of any person shall be considered for the purpose of this Act to be his place of business. At the time of such registry and on or before the first day of July, annually thereafter, every person who produces, imports, manufactures, compounds, deals in, dispenses, sells, distributes, or gives away any of the aforesaid drugs shall pay to the said collector a special tax at the rate of \$1.00 per annuam: Provided, That no employee of any person who produces, imports, manufactures, compounds, deals in. dispenses, sells, distributes, or gives away any of the aforesaid drugs, acting within the scope of his employment, shall be required to register or to pay the special tax provided by this section: Provided further. That the person who employs him shall have registered and paid the special tax as required by this section: Provided further. That officers of the United States Government who are lawfully engaged in making purchases of the above-named drugs for the various departments of the Army and Navy, the Public Health Service, and for Government hospitals and perisons, and officers of any State government, or of any county or municipality therein, who are lawfully engaged in making purchases of the above-named drugs for State, county, or municipal hospitals or prisons, and officials of any Territory or insular possession or the District of Columbia or of the United States who are lawfully engaged in making purchases of the above-named drugs for hospitals or prisons therein shall not be required to register and pay the special tax as herein required.

It shall be unlawful for any person required to register under the terms of this Act to produce, import, manufacture, compound, deal in, dispense, sell, distribute, or give away any of the aforesaid drugs without having registered and paid the special tax provided for in this section.

That the word "person" as used in this Act shall be construed to mean and include a partnership, association, company, or corporation, as well as a natural person; and all provisions of existing law relating to special taxes, so far as applicable, including the provisions of section thirty-two hundred and forty of the Revised Statutes of the United States are hereby extended to the special tax herein imposed.

That the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall make all needful rules and regulations for carrying the provisions of this Act into effect.

SEC. 2. That it shall be unlawful for any person to sell, barter, exchange, or give away any of the aforesaid drugs except in pursuance of a written order of the person to whom such article is soid, bartered, exchanged, or given, on a form to be issued in blank for that purpose by the Commissioner of Internal Revenue. Every person who shall accept any such order, and in pursuance thereof shall sell, barter, exchange, or give away any of the aforesaid drugs, shall preserve such order for a period of two years in such a way as to be really accessible to inspection by any officer, agent, or employee of the Treasury Department duly authorized for that purpose, and the State, Territorial, District, municipal, and insular officials named in section five of this Act. Every person who shall give an order as herein provided to any other person for any of the aforesaid drugs shall, at or before the time of giving such order, make or cause to be made a duplicate thereof on a form to be issued in blank for that purpose by the Commissioner of Internal Revenue, and in case of the acceptance of such order, shall preserve such duplicate for said period of two years in such a way as to be readily accessible to inspection by the officers, agents, employees, and officials hereinbefore mentioned. Nothing contained in this section shall apply—

- (a) To the dispensing or distribution of any of the aforesaid drugs to a patient by a physician, dentist, or veterinary surgeon registered under this Act in the course of his professional practice only: Provided, That such physician, dentist, or veterinary surgeon shall keep a record of all such drugs dispensed or distributed, showing the amount dispensed or distributed, the date, and the name and address of the patient to whom such drugs are dispensed or distributed, except such as may be dispensed or distributed to a ptaient upon whom such physician, dentist or veterinary surgeon shall personally attend; and such record shall be kept for a period of two years from the date of dispensing or distributing such drugs, subject to inspection, as provided in this Act.
- (b) To the sale, dispensing, or distribution of any of the afore-said drugs by a dealer to a consumer under and in pursuance of a written prescription issued by a physician, dentist, or veterinary surgeon registered under this Act: Provided, however, That such prescription shall be dated as of the day on which signed and shall be signed by the physician, dentist, or veterinary surgeon who shall have issued the same: And provided further, That such dealer shall preserve such prescription for a period of two years from the day on which such prescription is filled in such a way as to be readily accessible to inspection by the officers, agents, employees, and officials hereinbefore mentioned.
- (c) To the sale, exportation, shipment or delivery of any of the aforesaid drugs by any person within the United States or any Territory or the District of Columbia or any of the insular possessions of the United States to any person in any foreign country, regulating their entry in accordance with such regulations for importation thereof into such foreign country as are prescribed by said country, such regulations to be promulgated from time to time by the Secretary of State of the United States.
- (d) To the sale, barter, exchange, or giving away of any of the aforesaid drugs to any officer of the United States Government or of any State, territorial, district, county, or municipal or insular government lawfully engaged in making purchases thereof for the various departments of the Army and Navy, the Public Health Service, and for Government, State, territorial district, county, or municipal or insular hospitals or prisons.

The Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall cause suitable forms to be prepared for the purposes above mentioned, and shall cause the same to be distributed to collectors of internal revenue for sale by them to those persons who shall have registered and paid the special tax as required by section one of this Act in their districts, respectively; and no

collector shall sell any of such forms to any persons other than a person who has registered and paid the special tax as required by section one of this Act in his district. The price at which such forms shall be sold by said collectors shall be fixed by the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, but shall not exceed the sum of \$1.00 per hundred. Every collector shall keep an account of the number of such forms sold by him, the names of the purchasers, and the number of such forms sold to each of such purchasers. Whenever any collector shall sell any of such forms, he shall cause the name of the purchaser thereof to be plainly written or stamped thereon before delivering the same; and no person other than such purchaser shall use any of said forms bearing the name of such purchaser for the purpose of procuring any of the aforesaid durgs, or furnish any of the forms bearing the name of such purchaser to any person with intent thereby to procure the shipment or delivery of any of the aforesaid drugs. It shall be unlawful for any person to obtain by means of said order forms any of the aforesaid drugs for any purpose other than the use, sale, or distribution thereof by him in the conduct of a lawful business in said drugs or in the legitimate practice of his profession.

The provisions of this Act shall apply to the United States, the District of Columbia, the Territory of Alaska, the Territory of Hawaii, the insular possessions of the United States, and the Canal Zone. In Porto Rico and the Philippine Islands the administration of this Act, the collection of the said special tax, and the issuance of the order forms specified in section two shall be performed by the appropriate internal-revenue officers of those governments, and all revenues collected hereunder in Porto Rico and the Philippine Islands shall accrue intact to the general governments thereof, respectively. The courts of first instance in the Philippine Islands shall possess and exercise jurisdiction in all cases arising under this Act in said The President is authorized and directed to issue such Executive orders as will carry into effect in the Canal Zone the intent and purpose of this Act by providing for the registration and the imposition of a special tax upon all persons in the Canal Zone who produce, import, compound, deal in, dispense, sell, distribute, or give away opium or coca leaves, their salts, derivatives, or preparations.

SEC. 3. That any person who shall be registered in any internal-revenue district under the provisions of section one of this Act shall, whenever required so to do by the collector of the district, render to the said collector a true and correct statement or return, verified by affidavit, setting forth the quantity of the aforesaid drugs received by him in said internal-revenue district during such period immediately preceding the demand of the collector, not exceeding three

months, as the said collector may fix and determine; the names of the persons from whom the said drugs were received; the quantity in each instance received from each of such persons, and the date when received.

SEC. 4. That it shall be unlawful for any person who shall not have registered and paid the special tax as required by section one of this Act to send, ship, carry, or deliver any of the aforesaid drugs from any State or Territory or the District of Columbia, or any insular possession of the United States, to any person in any other State or Territory or the District of Columbia or any insular possesion of the United States: Provided, That nothing contained in this section shall apply to common carriers engaged in transporting the aforesaid drugs, or to any employee acting within the scope of his employment, of any person who shall have registered and paid the special tax as required by section one of this Act, or to any person who shall deliver any such drug which has been prescribed or dispensed by a physician, dentist, or veterinarian required to register under the terms of this Act, who has been employed to prescribe for the particular patient receiving such drug, or to any United States, State, county, municipal, District, Territorial, or insular officer or official acting within the scope of his official duties.

SEC. 5. That the duplicate-order forms and the prescriptions required to be preserved under the provisions of section two of this Act, and the statements or returns filed in the office of the collector of the district, under the provisions of section three of this Act. shall be open to inspection by officers, agents, and employees of the Treasury Department duly authorized for that purpose; and such officials of any State or Territory, or of any organized municipality therein, or of the District of Columbia, or any insular possession of the United States, as shall be charged with the enforcement of any law or municipal ordinance regulating the sale, prescribing, dispensing, dealing in, or distribution of the aforesaid drugs. Each collector of internal revenue is hereby authorized to furnish, upon written request, certified copies of any of the said statements or returns filed in his office to any of such officials of any State or Territory or organized municipality therein, or the District of Columbia, or any insular possession of the United States, as shall be entitled to inspect the said statements or returns filed in the office of the said collector, upon the payment of a fee of \$1.00 for each one hundred words or fraction thereof in the copy or copies so requested. Any person who shall disclose the information contained in the said statements or returns or in the said duplicate-order forms, except as herein expressly provided, and except for the purpose of enforcing the provisions of this Act, or for the purpose of enforcing any law of any State or Territory or the District of Columbia, or any insular possession of the United States, or ordinance of any organized municipality therein, regulating the sale, prescribing, dispensing, dealing in, or distribution of the aforesaid drugs, shall, on conviction, be fined or imprisoned as provided by section nine of this Act. And collectors of internal revenue are hereby authorized to furnish upon written request, to any person, a certified copy of the names of any or all persons who may be listed in their respective collection districts as special-tax payers under the provisions of this Act, upon payment of a fee of \$1.00 for each one hundred names or fraction thereof in the copy so requested.

- SEC. 6. That the provisions of this Act shall not be construed to apply to the sale, distribution, giving away, dispensing, or possession of preparations and remedies which do not contain more than two grains of opium, or more than one-fourth of a grain of morphine, or more than one-eighth of a grain of heroin, or more than one grain of codeine, or any salt or derivative of any of them in one fluid ounce, or, if a solid or semi-solid preparation, in one avoirdupois ounce; or to liniments, ointments, or other perparations which are prepared for external use only, except liniments, ointments, and other preparations which contain cocaine or any of its salts or alpha or beta eucaine or any of their salts or any synthetic substitute for them: Provided. That such remedies and perparations are sold, distributed, given away, dispensed, or possessed as medicines and not for the purpose of evading the intentions and provisions of this Act. The provisions of this Act shall not apply to decocainized coca leaves or preparations made therefrom, or to other preparations of coca leaves which do not contain cocaine.
- SEC. 7. That all laws relating to the assessment, collection, remission, and refund of internal-revenue taxes, including section thirty-two hundred and twenty-nine of the Revised Statutes of the United States, so far as applicable to and not inconsistent with the provisions of this Act, are hereby extended and made applicable to the special taxes imposed by this Act.
- SEC. 8. That it shall be unlawful for any person not registered under the provisions of this Act, and who has not paid the special tax provided for by this Act, to have in his possession or under his control any of the aforesaid drugs; and such possession or control shall be presumptive evidence of a violation of this section, and also of a violation of the provisions of section one of this Act: Provided, That this section shall not apply to any employee of a registered person, or to a nurse under the supervision of a physician, dentist, or veterinary surgeon registered under this Act, having such possession or control by virtue of his employment or occupation and

not on his own account; or to the possession of any of the aforesaid drugs which has or have been prescribed in good faith by a physician, dentist, or veterinary surgeon registered under this Act; or to any United States, State, county, municipal, District, Territorial, or insular officer or official who has possession of any said drugs, by reason of his official duties, or to a warehouseman holding possession for a person registered and who has paid the taxesc under this Act; or to common carriers engaged in transporting such drugs: Provided further, That it shall not be necessary to negative any of the aforesaid exemptions in any complaint, information, indictment, or other writ or proceeding laid or brought under this Act; and the burden of proof of any such exemption shall be upon the defendant.

SEC. 9. That any person who violates or fails to comply with any of the requirements of this Act shall, on conviction, be fined not more than \$2,000 or be imprisoned not more than five years, or both, in the discretion of the court.

SEC. 10. That the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, is authorized to appoint such agents, deputy collectors, inspectors, chemists, assistant chemists, clerks, and messengers in the field and in the Bureau of Internal Revenue in the District of Columbia as may be necessary to enforce the provisions of this Act.

SEC. 11. That the sum of \$150,000, or so much thereof as may be necessary, be, and hereby is, appropriated, out of any moneys in the Treasury not otherwise appropriated, for the purpose of carrying into effect the provisions of this Act.

SEC. 12. That nothing contained in this Act shall be construed to impair, alter, amend, or repeal any of the provisions of the Act of Congress approved June thirtieth, nineteen hundred and six, entitled "An Act for preventing the manufacture, sale, or transportation of adulterated or misbranded, or poisonous, or deleterious foods, drugs, medicines, and liquors, and for regulating traffic therein, and for other purposes," and any amendment threof, or of the Act approved February ninth, nineteen hundred and nine, entitled "An Act to prohibit the importation and use of opium for other than medicinal purposes," and any amendment thereof.

## REGULATIONS.

Under the authority conferred by section 1 of the above-quoted act, the following regulations are issued:

ARTICLE 1. As required by section 1 of said Act, every person, partnership, association, company, or corporation therein described, and not specifically exempt, must, on or before the first day of March, 1915, register with the collector of the district, and must at the time

of such registry, and on or before the first day of July in each year thereafter, pay to such collector a special tax at the rate of \$1 per annum.\*

If the applicant (other than a physician, dentist, or veterinarian) has more than one place of business, or if, in any case, the applicant is engaged in more than one profession or business where any of the drugs above described are made, stored, or dispensed, a separate application for registry must be made, and a special tax must be paid, in each such case.

ART. 2. Application for registry, and for the necessary special tax stamps will be in the following form,\*\* blanks of which form should be obtained from the collector of the district.

FORM 678.—OPIUM, 593.
APPLICATION FOR REGISTRY, AND FOR SPECIAL TAX STAMP.

(Act of Congress approved Dec. 17, 1914.) Registry No. .....\State of..... Name or style of applicant...... County of..... TO THE COLLECTOR OF INTERNAL REVENUE. ....District of ...... The undersigned, under the above name or style, and at the place above designated, is now engaged, or intends to engage Pursuant to an act of Congress, approved December 17, 1914, application is hereby made for registration under said Act, and for a special tax stamp for the special tax year ending June 30, 191... (In case of a firm, or corporation, to be signed by the principal member or officer.)

Subscribed and sworn to before me this....day of...........191...

(SEAL.).....

<sup>\*</sup>The special tax imposed for the period Mar. 1, 1915 to June 30, 1915 (the close of the special tax year), will be 34 cents. Remittances for special taxes should be made in currency, money order, or certified check on a National or State bank.

<sup>\*</sup>For convenience, and to conform to other requirements of law relating to special taxes, made applicable by this act, the application for registry and special tax stamp is here combined.

<sup>\*\*\*</sup>Here state business, or occupation or profession, as the "practice of medicine," or the "practice of dentistry," or "practice of veterinary medicine and surgery," or the "importation and sale of drugs coming under the operation of the act," or the "manufacture and sale of drugs coming under the operation of the act," or the "sale and distribution at retail of drugs coming under the operation of the act." If intended for analytical laboratory or hospital, so state.

ART. 3. Applications in the form above prescribed when received by collectors, will be given a registry number, commencing with No. 1 in each district for the first application, and continuing in serial order as subsequent applications are filed. The registry number thus given each original application will be a permanent registry number for all renewal applications, and will be entered on all blank orders (art. 8) issued to the applicant.

All applications for registry will, on payment of the special tax imposed, be recorded alphabetically by classes in special record 10A., to be provided for that purpose.

- ART. 4. Appropriate coupon stamps, denoting payment of the special tax under the Act named, will be furnished collectors on requisition, and will be charged to them and accounted for as in the case of other special tax stamps.
- ART. 5. Where any of the drugs referred to in section 1 of the Act are to be sold or otherwise disposed of, the purchaser or receiver (unless specifically exempt under section 2 of the Act) will, prior to such purchase or receipt, issue his order therefor and in the form prescribed in article 8 of these regulations.
- ART. 6. Blanks of such order forms will be printed on distinctive paper and will be issued in tablets or books of ten blanks each, and a charge for such blanks (including original and duplicate) will be made at the rate of \$1.00 per hundred, as authorized by section 2 of the Act, and will be so accounted for by collectors to whom the same are furnished.

Such blank orders must in all cases be procured from the collector of the district by persons using the same, but no requisition therefor will be accepted by collectors unless made by persons who have duly registered (art. 2) and who have paid the special tax as required by law; and, in such cases, only where the collector is satisfied that such blanks will be used for no unlawful purpose.

In addition to the special record 10A., provided for in article 3, collectors will keep a record or account of the number of such order forms sold by them, the name of each purchaser, and the number sold to each, as required by section 2 of said Act.

ART. 7. Requisitions for such blanks will be in the following form; and, in filling such requisitions, the collector will cause the registry number and name of the applicant to be stamped on each blank issued by him. Adjustable name and numbering stamps will be supplied collectors for this purpose.

## EDITORIAL

FORM 679	•		
	Regi	rtry No	· · · · · *
Requisition for	BLANK ORDERS.		
Act of Congress, appr	roved Dec. 17, 1914	4.) ·	
TO COLLECTOR OF INTERNAL REVEN	UE,		٠,
District of	••••	19:	1—.
SIR: Requisition is heerby ma to be used solely in connection with set forth in my (or our) application	the business, or	for the pu	rpose,
pursuant to an Act of Congress, ap	proved December 1	7, 1914.	
1	(In case of a firm be also signed by principal officer.)	or compa a memb	ny, to er, or
ART. 8. Upon receipt of such a will be compared with the applica the blank orders called for are iss	tions for registry,		
Such blank orders will be in the	following form:		
	District of		
=	ry No		<b>}***</b>
•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	) ,
ORDER FOR	OPIUM, ETC.		
(Act of Congress, app	proved Dec. 17, 1914	l.)	
То,			
	1		
Please ship goods by	, as follows:		
Specific description of articl	Quantity.	*****	
	***************************************		
••••	• • • • • • • • • • • • • • • • • • • •		• • • • • •
••••			
(F	Iere sign with full	name, bu	ısiness

and address.

The registry number must in all cases be filled in by the applicant.

<sup>\*\*</sup>The number to be here stated will be 10 or a multiple of 10.

<sup>\*\*\*</sup>To be filled in by collector.

<sup>\*\*\*\*</sup>Here give trade name of drugs.

 $<sup>\</sup>mbox{\ \ }^{\bullet\bullet\bullet\bullet\bullet\bullet}$  This space to be reserved for use of the person filling the order, for any purpose desired by him.

- Art. 9. The above order must be prepared in duplicate, the duplicate of which will be retained by the maker. If accepted, the law requires all such orders (both original and duplicate) to be retained on file for a period of two years, and in such a way as to be readily accessible to the inspecting officer. Persons accepting such orders, therefore, will file the same in their numerical order, i. e., according to their registry numbers as to each collection district.
- Art. 10. Under the exempting provisions of section 2 of the act, no written order is required for the "dispensing or distribution of any of the aforesaid drugs to a patient by a physician, dentist, or veterinary surgeon, registered under this act, in the course of his professional practice only." A record, however, is required to be kept of all such drugs so dispensed or distributed (except such as may be dispensed or distributed to a patient, upon whom such physician, dentist, or veterinary surgeon shall personally attend—i. e., personally visit) and must show:
  - 1. The date when any such drug is dispensed or distributed;
- 2. The kind and quantity dispensed or distributed in each case; and
- 3. The name and residence of the patient to whom such drug was dispensed or distributed. (For form of prescriptions, see Art. 12.)

The record so kept must be preserved for a period of two years from the date of dispensing or distributing, and will be subject to inspection as provided in section 5 of the act. Each physician, dentist, and veterinary surgeon must supply himself with a suitable blank book for such record.

Art. 11. A like exemption to that above noted is made as to drugs dispensed or distributed under and in pursuance of a written prescription issued by a physician, dentist, or veterinary surgeon, duly registered under this act. But all such prescriptions covering such drugs, not specifically exempt by section 6 of the act, must be dated and signed as of the day when issued; must be preserved for a period of two years from the time when filled, and must be readily accessible to the inspecting officers above referred to.

A separate file for all such prescriptions should therefore be kept by each druggist or apothecary filling the same, but such prescriptions may be numbered consecutively with other prescriptions received. Unless so filed a record must be kept showing:

- 1. The file number given to each prescription filled;
- 2. The name of the physician or surgeon signing the same; and
- 3. The name of the person for whom such prescription is filled.

Druggists must furnish their own record books for this purpose.

Art. 12. Under the authority conferred by section 1 of the act named, for the issuing of regulations necessary for carrying the provisions of the act into effect, physicians and surgeons writing any such prescriptions are hereby required to sign their name in full to the same, to state therein their registry number and the location of their office, and the name and address of the person for whom such prescriptions are written. Druggists and apothecaries must refuse to fill any such prescription unless signed as herein required; nor must prescriptions for such drugs be filled by any druggist or apothecary, if he has reason to suspect that it was fraudulently issued or obtained.

The dispensing of such drugs by druggists or apothecaries, except on physician's original prescriptions, or on original orders issued to persons who have duly registered, will be in violation of the act. Refilling of prescriptions or orders is therefore prohibited.

Art. 13. Every person, firm, or company dispensing directly to consumers any of the drugs herein referred to will, on the 1st day of March, 1915, prepare and keep on file an inventory of all such drugs (other than preparations or remedies specially exempt under the provisions of section 6 of the act) on hand at that date. No special form of inventory is here required, but the inventory made must fully and clearly set forth the quantity of each kind of such drugs, preparations or remedies so held, and must be verified by oath not later than the 5th day of March, 1915.

## Art. 14. Section 3 of the act provides:

"That any person who shall register in any internal-revenue district under the provisions of section 1 of this act shall, whenever required to do so by the collector of the district, render to the said collector a true and correct statement or return, verified by affidavit, setting forth the quantity of the aforesaid drugs received by him in said internal-revenue district during such period immediately preceding the demand of the collector, not exceeding three months, as the said collector may fix and determine. . . ."

Under the authority thus granted collectors will require such sworn statements in all cases where, from the number of order blanks obtained by any person, or from the character of the business carried on, he has reason to suspect that any of the drugs referred to are being procured, compounded, or disposed of by such person for illegal purposes, and in such other cases as he may think it advisable.

Art. 15. The request for such statement and the statements to be furnished in such cases will be made on the following form:

# Form 680.—Oplum, Etc.

REQUEST FOR STATEMENT AS TO RECEIPT, ETC., OF CERTAIN DRUGS SPECIFIED IN ACT OF CONGRESS APPROVED DECEMBER 17, 1914.

Office of Collector, ..... District of .....

				,
То		,		, 191
		,	•	
Purs	uant to the	provisions	of section 3 of an act of	Congress
relating	to the purch	hase, sale, o	r disposal of certain drugs	, approved
Decemb	er 17, 1914, <u>j</u>	you are he <mark>r</mark> e	by requested to furnish me	on or be-
fore the	da;	y of	, 191, with a true a	nd correct
s <b>tatem</b> ei	nt, verified b	y affidavit,	of the quantity of each an	d all such
drugs re	eceived by yo	ou in this di	strict since	, 191,
giving t	he names of	the persons	from whom the said drug	s were re-
ceived, t	he quantity	in each inst	ance received from each su	ch person,
and the	date when r	eceived.		
The	statement he	ere called fo	r will be prepared and sul	mitted on
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Art. 16. It will be the duty of agents and other inspecting officers appointed under the provisions of section 10 of the act named to visit at irregular intervals the premises of all persons, firms, or companies registering under said act, or where they have reason to believe drugs of the character defined in the act are stored, and to see that all requirements of the act and these regulations are strictly complied with. They will, under the authority conferred by sections 2 and 5 of the act, inspect and, when necessary, verify such records, orders, prescriptions, statements, or returns made or received and at once report for prosecution any violations of the law discovered by them.

Where suspected drugs are found on the premises of manufacturers or dealers who have not registered, samples of the same should be procured and forwarded to the laboratory in the office of the Commissioner of Internal Revenue for analysis.

Art. 17. Investigations here ordered made in a perfunctory manner will in no instance be tolerated, and any officer or employe who is found to be negligent or inefficient in the discharge of his duties will be reported to this office for discipline. It is not expected, however, that officers and employes will conduct their investigations in such manner as to annoy or interfere unnecessarily with the business of persons preparing or handling the aforementioned drugs. Officers in making their investigations should keep this clearly in mind. They will, however, see that the law and regulations are faithfully complied with in every instance; and it will be the duty of every person engaged in this business to afford all necessary facilities to such inspecting officers.

W. H. OSBORN,

Commissioner of Internal Revenue.

Approved:

W. G. McADOO.

Secretary of the Treasury.

In conclusion, we beg leave to add the following summary for the benefit of our professional friends and readers:

Make application to the Collector of Internal Revenue of your District or Deputy Collector in person or by mail for registration blank to be obtained from such Collector; and pay the required tax. Do this at once. Do not wait.

Make application to the same official for the number of order forms wanted and tender payment for same at rate of \$1.00 per hundred. Application should be made on blank to be obtained from the Collector of Internal Revenue.

Take an inventory (accurate) March 1, 1915, of every article (amount) coming under the operation of the law.

Make all orders for drugs coming under the operation of the law in duplicate upon order forms secured according to second paragraph above, and keep on file for two years.

Keep a record of all drugs coming under the operation of the law dispensed or distributed (except when dispensed or distributed directly to the patient) showing: (a) date when such drug is dispensed or distributed; (b) kind and quantity dispensed or distributed in each case; (c) name and residence of the person to whom such drug was dispensed or distributed. This record to be kept for two years subject to inspection. (Additional exceptions, sections 2 and 6 of the law; pages 108, 111).

Druggists cannot fill prescriptions unless: (a) the transcriber has registered under the act; (b) the prescription must be dated as of the day issued and signed by the prescriber; (c) the prescription must give the office or residence address and registry number of the prescriber, and name and residence of the patient.

This is a national revenue law, and is not influenced by or effected by any state or municipal laws as to the drugs mentioned therein.

THE TREATMENT OF INACCESSIBLE HEMORRHAGE:—Every physician feels the need occasionally of a reliable agent in persistent hemorrhage that is inaccessible to the ordinary modes of treatment. In Coagulose we have a product that meets this want—meets it better, it is believed, than any agent hitherto employed for the control of hemorrhage due to defective coagulation of the blood. Coagulose is prepared in the biological laboratories of Parke, Davis & Co., from normal horse serum. It is a sterile, anhydrous powder, obtained by 'precipitation. It contains the fibrin ferment necessary for clotting the blood and is soluble in cold water. It is administered hypodermically (subcutaneously).

Coagulose is indicated in all cases of hemorrhage due to defective clotting of the blood, as in purpura, hemorrhage of the new-born, nasal hemorrhage, hemorrhage from gastric or duodenal ulcer, pulmonary hemorrhage, hemorrhage during and after prostatectomy, hemorrhage from the kidney pelvis, hemorrhage from the bladder, uterine hemorrhage, and hemorrhage after turbinectomies and tonsillectomies. It is also useful as a local styptic to bleeding surfaces. For this purpose the powder may be applied on a tampon or on sterile gauze or cotton. Coagulose is supplied in 15-Cc. glass bulbs, each containing 0.65 gramme of the powder, equivalent to ten cubic centimeters of blood serum. A solution is made by the addition of six to eight cubic centimeters of sterile water.

Physicians are advised to write Messrs. Parke, Davis & Co., Detroit, Michigan, for their brochure on Coagulose, which contains the original article of Drs. Clowes and Busch, of Buffalo, who perfected the product, together with other valuable scientific research matter pertaining to the serum treatment of hemorrhages and blood dyscrasiae.

FOR THE LIVER PATIENT!—For those patients who come to us with sallow complexions, chronic indigestion, and that whole train of autotoxic symptoms generally grouped under the term "biliousness," there is one remedy that immediately suggests itself to those who are familiar with its virtues. That remedy is Chionia. Made from one of the other drugs that time and clinical experience have shown to possess cholagogue powers of a very definite and positive character, Chionia is invaluable in the treatment of these cases that we are prone to speak of as "liver patients." The livers of these people are inactive, their portal circulations are sluggish, and their systems are overloaded with toxic products that have not been thrown off as they are by those in whom the excretory functions of the liver are normally active.

Many of these patients have sought relief from the use of cathartics, laxatives, etc. For a time, these measures have seemed effective. But only temporarily, for real hepatic stimulation is seldom thus afforded. A true liver stimulant is needed, and this is why Chionia gives such satisfactory results, for its main, and to a certain extent, specific action is to increase the functional activity of the liver. Chionia can be relied upon, therefore, to correct these conditions due to liver torpor, and happily, without giving rise to catharsis or upsetting and exhausting the patient in the way that other cholagogues will. In view of the efficiency of Chionia it can easily be understood why so many successful practitioners look upon it as a "sine qua non" in the treatment of those who are afflicted with sluggish livers.

ANTI-TYPHOID INOCULATION:—As this important prophylactic measure has been quite generally resorted to in the British Army, the following news item is of no little importance: Only two hundred and twelve cases of typhoid fever have been reported in the British troops along the Franco-Belgian lines from August, 1914, to February, 1915. One hundred and seventy-three of these were not inoculated, and of the thirty-nine inoculated who were attacked, not one died—all mild cases with rapid recovery. And this in mud, slush, rain, snow and all the privations of active service in war, during an autumn and winter campaign of unusual severity.

TENNESSEE STATE MEDICAL ASSOCIATION:—This time-honored and venerable medical organization will hold its eighty-second annual meeting in this city Tuesday, Wednesday and Thursday, April 13, 14 and 15, prox. Dr. S. M. Miller, of Knoxville, is the President; Dr. Olin West, of Nashville, Secretary; and Dr. C. W. Cowden, also of Nashville, Treasurer.

The Committee of Arrangements consists of Dr. Perry Bromberg, Chairman, and Drs. H. M. Tigert, R. A. Barr, W. C. Dixon, and W. D. Haggard, all of Nashville, insuring a largely attended and most enjoyable meeting. As a rule, the meetings at the State Capital are the most largely attended, and we have every confidence in the belief that the coming meeting will exceed any of its predecessors.

According to reports in the hands of the Secretary December 31, ult., the membership amounted to 1,441, with 63 of the 96 counties in the State represented, leaving 33 counties in which no medical organization in affiliation with the State Association exists. There being about 3,400 doctors in the State, there are yet nearly 2,000 who have not yet enrolled in State or County organizations. The larger and more populous counties have shown a greater desire to participate in the important work of organization and affiliation; yet, it is possible that a little more missionary work in the future will succeed in bringing others into the fold. There is no reason why the membership should not be increased by over one thousand additional members in the near future.

CONVALESCENCE:—The secret of prompt recovery from many a serious illness will be found in the prompt institution of tonic treatment. The resulting uplift is often all that is needed to enable the body to reestablish a nutritional balance and develop adequate resistance.

Thus, after the acute diseases, such as typhoid fever, pneumonia, pleurisy, influenza, or those requiring surgical operations like appendicitis, intestinal ailments, utero-ovarian ailments and so on, the return to health often hinges on the thought and care given to restorative treatment. If a reconstructive like Gray's Glycerine Tonic Comp. is used, the result is rarely if ever in doubt. Unlike many remedies used to promote convalescence, Gray's does not whip up weakened forces. On the contrary, it aids and reinforces them by increasing the power and capacity of physiologic processes throughout the body. Thus the appetite is improved, digestive and absorptive functions are activated, and the resulting improvement in cellular nutrition insures a notable gain in vitality and strength. Weakness and debility vanish as vitality and strength appear. This tells why "Gray's" is so useful and effective after the acute diseases.



THERAPY OF NERVOUS HEADACHES:—The advantages of Pasadyne (Daniel), the concentrated tincture of Passifiora Incarnata, as a means of relief in headaches of a nervous type are so marked that it seems to warrant the distinction of being put in a class by itself. In this condition, PASADYNE (Daniel) not only soothes the cephalalgia but also exerts a potent force on the nervous element so noticeable in these cases. It may be given to women and children without causing unpleasant symptoms, oftentimes a feature of other agents. A sample bottle for trial may be had by addressing the laboratory of John B. Daniel, Atlanta, Ga.

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

SEND FOR IT:—A unique little brochure (24 pages) on "Clinical Symptomatology" has already been distributed to the medical profession by the Purdue Frederick Company, who prepare the well-known Gray's Glycerine Tonic Comp. This consists of a number of tables or charts giving the common or usual "symptom-complex" of each of sixty different diseases, and will prove of exceptional value for reference purposes. If any physician did not receive a copy of "Clinical Symptomatology" he can easily obtain a copy by addressing The Purdué Frederick Company, 135 Christopher Street, New York City.

INDISPUTABLE AUTHORITATIVE EVIDENCE:—Hayden's Viburnum Compound is compounded from remedies of acknowledged therapeutic value, and so acclaimed by the leading therapeutists of this country. The therapeutic action of the principal ingredients is attested to and so stated in recognized textbooks upon Materia Medica and Pharmacology.

A recent brochure, "The Reason Why," just issued by the New York Pharmaceutical Company, Bedford Springs. Bedford, Mass., presents not only those conditions in which Hayden's Viburnum Compound has proven to be of particular service, but also an abstract from leading authorities attesting to the therapeutic activity of its principal component parts. A card addressed to the above named firm will bring you this booklet.

GLYCO-THYMOLINE IN TONSILITIS:—A local remedy must fill two requirements—it must be a detergent antiseptic and produce a degree of permanency of effect. Glyco-Thymoline as a gargle, or used with an atomizer, produces excellent results. It rapidly relieves the dry, congested condition of the mucous membrane by its exosmotic action, and its anodyne effect is immediate and lasting.

Glyco-Thymoline is harmless, and if any is swallowed will produce a beneficial effect by breaking up any mucous plugs that may have gained access to the stomach.

AFTER AN ALCOHOLIC DEBAUCH:—As a sedative in relieving the extreme nervous irritability and hypercerebration following excessive use of alcoholic drinks, Bromidia (Battle) gives a striking demonstration of its therapeutic powers. A few moderate sized doses and relief is at hand.

The constituents of Bromidia, which are chosen with an eye toward purity, are carefully compounded, and thus the evil effects of hastily prepared mixtures are avoided.

TONGALINE & LITHIA TABLETS are particularly indicated for certain diseases which are caused by deposits of urates in the joints and kidneys, and can be used with much benefit for many people who indulge in generous or intemperate habits of living.

After the acute forms of malarial fever are checked by quinine, a slow form of fever sometimes persists not amenable to the quinine. In such cases Tongaline & Quinine Tablets will prove very efficacious. PIL. CASCARA COMP. (Robins):—Normalize peristaltic action instead of inhibiting it, as so many evacuants and cathartics do. They stimulate a flow of secretions, thus encouraging a normal physiological evacuation. A trial the most convincing argument. Send for samples and literature to A. H. Robins Co., Richmond, Va.

IODINIZED EMULSION (Scott):—An ideal intestinal antiseptic. Indicated in Typhoid and other slow fevers, dysentery, chronic diarrhea and gastro-intestinal troubles. Write to The Dawson Pharmacal Co., Dawson Springs, Ky., for samples and literature.

# Selections

EARLY RECOGNITION OF CANCER:—I. Levin, of New York, insists on thorough examination in every case which might be cancer. Among the different varieties he offers these diagnostic points:

Carcinoma of the Larynx.—Hoarseness occurring in a middle-aged person and not accompanied with coughing, is a constant symptom of a beginning malignancy, and appears very early in the disease. A laryngoscopic examination will easily differentiate carcinoma from tuberculosis, syphilis, or other pathological conditions, which may cause hoarseness, and operation at the early stage of the disease gives nearly a 100 per cent of cure. On the other hand, a very slight delay may render the case inoperable.

Carcinoma of the Stomach.—When a person at middle age, whose stomach and bowels usually acted normally, suddenly begins to complain of loss of appetite, pressure and light pain in the gastric region, nausea accompanied with constipation interchanging with diarrhea, headache and general fatigue, the possibility of a beginning malignancy should be immediately considered, and a complete diagnostic analysis of the whole organism should be undertaken. It is not the place here to consider the comparative value of the chemical or radiographic analysis or an exploratory laparotomy. Everything should be undertaken

in doubtful cases. It must be borne in mind that an abdominal incision gives no mortality, that carcinoma of the stomach gives a high percentage of radical surgical cures, and that, on the other hand, when a tumor of the stomach can be felt and cachexia is present then the case is hopeless.

Many a case of carcinoma of the stomach is being treated with laxatives and gastric tonics for weeks before an attempt at diagnosis is made.

Carcinoma of the Rectum.—The feeling of pain and pressure in the rectum on the movement of the bowels and bleeding upon the passage of hard feces may be due to hemorrhoids as well as to a beginning carcinoma of the rectum, but to prescribe for and treat such symptoms without inspecting the anus and inserting the finger in the rectum should verge very near on criminal negligence. None the less, hardly a patient with a carcinoma of the rectum comes to the specialist without having been treated for a longer or shorter period of time by a general practitioner for hemorrhoids without an attempt at a rectal examina-Here again a timely operation gives a fair chance of complete recovery, while the usual delay caused more frequently by the family physician than the patient himself. reduces the number of radically cured cases of carcinoma of the rectum to a very small percentage.

Carcinoma of the Uterus.—Irregular metrorrhagia accompanied by an offensive watery vaginal discharge, occurring in middle-aged women whose menstruation either ceased or became already atypical, bleeding which occurs upon exertion or a coitus, are indications of malignancy. An early diagnosis is easly obtained at this stage and an early operation gives a very high proportion of complete recovery.

Carcinoma of the Breast.—Any growth in the breast in a woman of middle age is best considered and treated as a malignant condition. The investigations of Bloodgood, of Halsted's Clinic, have shown that, when tumors of the breast were operated upon at the early stage, when the

# Abortive Treatment of Acute Rhinitis

In most cases of coryza, cystogen in full dozes (gr. X-XV. 4 times daily for an adult) acts promptly and effectively if treatment is given at the inception of the attack. The irritation is relieved, the watery secretion is checked, and the 'stuffiness' and headache disappear.
Where the 'cold' is well established, this treatment will materially

shorten the infection, reduce the quantity of purulent secretion and lessen the danger of complications such as sinusitis, otitis media, and

bronchitis.

# Cystogen-Aperient and Cystogen-Lithia

(Granular Effervescent Salt)

Cystogen gr. V. FORMULA A teaspoonful contains Sod. Phos. gr. XXX. Sod. Tart. gr. XXV.

DOSE: One to three teaspoonfuls in a glass of water t. i. d.

(Effervescent tablet of Cystogen 3 grains and Lithium Tartrate 3 grains.)

DOSE: Two or three tablets in a glass of water, three or four times daily.

are suggested as specially convenient forms in which to administer this drug.

#### CYSTOGEN PREPARATIONS.

Cystogen-Crystalline Powder. Cystogen-5 grain Tablets. Cystogen-Lithia (Effervescent Tablets.) Cystogen-Aperient (Granular Effervescent Salt with Sodium Phosphate.)

# CYSTOGEN CHEMICAL CO.

515 Olive Street

ST. LOUIS. U.S.A.

# **Colds and Influenza**

quickly respond to the anodyne, antipyretic and sedative action of

No prompt and decided are the effects of this reliable pain-reliever that it is the first remedy countless physicians turn to in the treatment of these affections. Clinical experience has shown conclusively that its administration is followed by a rapid reduction of temperature, a market decrease of muscular soreness, and a gratifying relief of pain. Best of all, these results are obtained without the systemic disturbance, digestive derangement, constipation or danger of habit formation that are inseparable

from the use of opium preparations.

In all painful conditions where an anodyne is indicated, Phenalgin is "the logical supplanter of opium."

Specify "Phenalgin Pink Top Capsules."

Samples and interesting information on request

THE ETNA CHEMICAL CO. 59 Bank Street, New York

Digitized by GOOGIC

# **Morphinism**

The Opium "Habit" Disease.

Every physician engaged in general practice has patients addicted to the use of morphine or opium in some form, apply to him for relief, and with the aid of *Manine* these cases can be treated successfully right at home. It will only be necessary for the patient to call and see the physician once or twice each week while under treatment, and most any case of morphinism or drug addiction should be completely cured in sixty or ninety days at most.

Morphinism, or the opium "habit" disease is one of the easiest of all afflictions to cure, when *Manine* is used and the *Manine* method is closely followed. A cure can be brought about without making the patient sick, without suffering, and without its being necessary for the patient to quit work even for a day.

In morphinism there is a disease to treat, not a mere habit or simple vice to palliate. The drug diseased victim is a sick person and in order to cure this affliction it must be treated along the same lines that any other disease would be treated; the cause must be removed. *Manine* replaces the wasted tissues with new material, nurses the diseased nerves back to health and brings about a cure by removing the cause which makes the use of the drug a necessity.

Manine does not contain one particle of morphine, opium, cocaine, chloral, or any heart depressant or habit-forming drug; it is an absolutely safe remedy, can be given to anyone, and no possible harm can come from its use.

Manine is now being used by almost two thousand physicians in the treatment of morphinism, in nervous troubles, and in cases where a general tonic, nerve and tissue builder is required.

Full information regarding the *Manine* method of treatment sent physicians on request.

THE MANINE MEDICINE COMPANY.

612 Princess Bldg.

St. Louis, Missouri

diagnosis of malignancy could not yet have been made before the operation, the percentage of radical cure was over 80, while the operations on cases with the complete clinical signs of malignancy gave only 24 per cent of cures. The loss of a breast by a woman past child-bearing age is a very slight discomfort or disfigurement in comparison with the possibility of the development of cancer. Any benign tumor of the breast may subsequently become malignant. —(Arch. Diagnosis, No. 1, 1914.)

NEW TREATMENT FOR NEURALGIA:—Grasset and Rimbaud use subcutaneous injections of air or water in neuralgia. The object is to free the nerve-endings held fast in the hyperemic tissues. Surmont and Dubois make use of distilled water, Debove and Bruhl use saline (75 per cent) or Hayem's serum:

Codium	Chloride								 				 5
Sodium	sulphate								 				 10
Steriliza	ed Water	 		_	_		_	_	 	_	_	_	 100

The injections are given at the painful spots in a dose of from 5 to 10 c.c. repeated every two or three days. Sciatica can be cured by 10 to 15 injections.

Cordier, of Lyons, was the first to use injections of air for neuralgia, using an apparatus similar to Paquelin's cautery, in which the cautery point is replaced by a needle, the air being filtered through a tube plugged with absorbent wool. The pump of Potain's aspirator may be used in like manner. The seats of election for the injections in the case of sciatica are the upper part of the buttock, the middle and after parts of the thigh, and the outer side of the leg. After having put in the needle, it is necessary to make sure that the point is not in a vessel. Air is then pumped in very gently, and the patient should only feel some numbness and tingling. The air spreads out irregularly under the skin, makes the limb torpid, and reaches the loins and the popliteal space. From 500 to 2000 c.c. are thus injected, and the gas is absorbed in from two days to a fort-

night. The method is extremely simple, harmless and painless; the patient is nearly always relieved at once. Intercostal neuralgia may be treated in the same way; femorocutaneous neuralgia has been relieved; while good results have been obtained in the diffuse painful neuritis, following severe injuries like contusions of the shoulder and the hip.

In obstinate cases of sciatica, Sicard advises a combination of injections of air, and of water, and epidural injections. He injects from 800 to 1200 c.c. of air at the level of the leg; from 60 to 80 c.c. of normal saline containing about 1-2 c.g. of novocain immediately below the sciatic notch in the upper part of the ischiotrochanteric groove; and finally, from 10 to 20 c.c. of the same solution into the lower sacro-lumbar epidural region.—Journ. de Med. et de Chir. prat., lxxxiv. 15.

THE PHYSICIAN AND ACUTE OSTEOMYELITIS:—The surgeon has visited upon the head of the physician much blame for his tardiness and temporizing in cases of appendicitis. The physician has merited all of the criticism that has been heaped upon him, and even then he was, perhaps, let off too lightly.

The same may be said of the physician's relation to gastric ulcer, duodenal ulcer, perforating typhoid ulcer, apoplexy, empyema, metrorrhagia, and "rheumatism." Indeed, as we look over the catalogue of human ills, it is difficult to find one in the treatment of which the surgeon might not render aid.

In some of these diseases, conditions develop which surgery would cure, but which without the surgeon often go on to healing. In others the treatment which the surgeon applies results disastrously. Still, in all of these conditions if modern surgery were applied the chances of recovery are better than without it.

Acute osteomyelitis belongs in a class by itself. It is wholy surgical. The physician has no business with it for a single minute. This can scarcely be said of any other disease. Even cancer is not wholly surgical; the surgeon often can do nothing more than the physician. But with acute osteomyelitis the surgeon can always do something.

There is but one treatment for this disease. As soon as the infection occurs and begins to make pressure within the bone, the damage begins. To relieve the pressure in the medullary cavity and secure drainage through its bony sheath is imperative. Unless this is done promptly, the infection and inflammation, confined under the presure of non-yielding bone, cause necrosis of more medulla, death of the bone, and absorption into the general system of the products of the infection. Most important among the latter are the infective organisms themselves. Metastatic foci develop, and to the local destruction is added a virulent general infection which threatens the bones, joints, the valves of the heart, and every other structure in the body.

These are the cases which come to the surgeon from the physician after having been treated for "rheumatism" or what-not. Necrotic bone, metastatic abscess, arthritis, and endocarditis have all developed often before the surgeon sees the case. If modern surgery is applied as soon as the disease is recognizable, a simple trephine opening into the bone suffices to cure the disease. Without this the case goes on; and loss of bone, crippling of limbs, invalidism or death may be expected.

The diagnosis of most surgical conditions may fail even in experienced hands. Many surgical conditions recover without surgery. Some are aggravated by surgery. But acute osteomyelitis is most easy of diagnosis, even in its earliest stages. It invariably does badly unless treated surgically. Its treatment is so simple that surgery at its worst cannot do as much harm as the disease.—J. P. W., in Am. Jour. of Surgery.

THE ACTION OF POTASSIUM AND SODIUM IODIDES AND OF THE IODINE ION ON THE HEART AND BLOOD VESSELS:-The Bulletin of the Johns Hopkins Hospital for September. 1914, contains an article by Macht on this subject. thinks from his experiments that the potassium ion produces a relaxation of the blood vessels and a marked depression of the heart: that the sodium ion has a slightly stimulating action on the blood vessels and also stimulates the heart: and that the iodine ion is a powerful stimulant to both the heart and blood vessels, as shown by its action in experiments on isolated organs. The stimulating effect of the iodine ions, however, is greatly inhibited in the intact animal by their chemical combination with the proteids of the blood. Whether the chemical compound thus produced is a stable one, or whether it is a loose one, and slowly breaks up, setting iodine free, remains an open question. If iodine is set free, a stimulating effect is to be expected.

The action of sodium and potassium iodides on the heart and vessels can be best understood from the action of their component factors. Sodium iodide possesses no depressing property, for the sodium ion is a vascular constrictor and a cardiac stimulant, and the idoine ion, in so far as it is free to act, has the same action.

Potassium iodide, on the other hand, clearly shows the depressing effect of the potassium ion on the heart and vessels, especially of the mammals, not only on isolated organs, but also in the living animals. It is therefore not a matter of indifference which of the iodides is to be chosen for the purpose of depressing the circulation, as, for instance, in case of an aneurism. The above pharmacological analysis of the action of the iodides, furthermore, shows that so far as experimental evidence goes, the iodides possess no special virtue of lowering blood-pressure, but that that effect is really due entirely to the potassium, and could be produced even more efficiently by other potassium salts.—Therapeutic Gazette.

A METHOD OF MARKING OUT AFTER THE USE OF TINCTURE OF IODINE:—In a case presenting a small area of tenderness in the popliteal space in which deep suppuration was suspected. Leveque (La Semaine Med.) marked the point to be incised with nitrate of silver and allowed it to become black on exposure to light, in the hope that it would remain visible after the skin was painted with tincture of iodine. On application of the iodine solution the mark, instead of showing faintly as black upon brown, became white from the formation of iodide of silver, and was easily seen against the brown staining of the surrounding skin. Since then he has frequently used the method for similar purposes with complete success. It is not necessary to wait for the reduction of the nitrate of silver by the action of light. It suffices to mark out the line of incision or other landmark with a slightly moistened stick of silver nitrate and immediately paint the parts with tincture of iodine, to obtain a white line, which remains visible for an hour. The reaction is equally successful when the nitrate of silver is applied several days before and painted with iodine before the operation.—Critic and Guide.

CHOREA:—Passini calls attention to the fact that the more recent text-books place chorea under the head of infectious diseases, instead of the diseases of the nervous system. In the Wiener Klinesche Wochenschrift for October he says that it has been shown that the choreic movements are due to irritation of the cerebral tracts passing from the red nucleus to the dentate nucleus. Some of the cases he reported had rheumatism and some others endocarditis. That portion of the nervous system involved had showed evidence that the condition was due to overpressure or toxic elements in the cerebro-spinal fluid. Lumbar puncture, if resorted to early, he believes, will have a direct curative action.—

S. E. E., in Indianapolis Med. Jour.

ANTI-TYPHOID VACCINATION:—In a very excellent article on this subject in the *Pennsylvania Medical Journal*, January, 1915, E. R. Whitmore, M.D., U. S. A., gives the following conclusions:

- 1. Anti-typhoid vaccination protects as well as does small-pox vaccination.
  - 2. There is no danger from a negative phase.
- 3. Anti-typhoid vaccination does not increase tuberculosis of other disease.

So, anti-typhoid vaccination is definitely indicated: (1) In the Army, Navy, National Guard; (2) among the personnel of all hospitals; (3) in schools, asylums, prisons, workhouses; (4) in camps of all kinds; (5) among travelers; (6) among young persons; since typhoid fever is a disease of youth and early life; (7) among persons living in cities or districts where the typhoid fever rate is continuously high; (8) among the members of a household where a case of typhoid fever occurs; all contacts; (9) as voluntary vaccination of the non-immune population on the occurrence of an epidemic of typhoid fever.

EMETIN IN THE TREATMENT OF TRAUMATIC HEMOPTYSIS:

—The virtues of emetin have been emphasized before Indianapolis physicians and the Indiana University Medical School students by Dr. S. E. Earp on frequent occasions. We note from the Paris letter on the war in the January 16 Journal A. M. A. that Drs. I. Dupont and J. Troisier, in view of the good results from emetin in tubercular hemoptysis, are arresting bleeding wounds of the thorax due to bullet wounds by one or two injections under the skin of 40 mg. of emetin hydrochloride. The dose may be safely doubled.

Not severe vascular hemorrhage but the pulmonary bleeding in men who may be removed to hospitals. This observation may be observed in civil practice.—A. W. Brayton, in Indianapolis Medical Journal.

# THE SOUTHERN PRACTITIONER

AN INDEPENDENT MONTHLY JOURNAL

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# Priginal Communications.

## PERITONITIS.\*

BY C. N. COWDEN, M.D., F.A.C.S., OF NASHVILLE, TENN.

The excuse I give for this paper upon this time-worn subject is because it is one that confronts the surgeon almost daily in his routine work, and only by a more thorough appreciation of the condition upon the part of the internist can we hope to improve our present mortality results in the treatment of this malady.

The majority of cases are first seen by the general practitioner, and the safety of the patient depends upon his quick decision and hearty co-operation with the surgeon. It is quite a problem and one requiring the highest degree of skill as a diagnostician to be able to decide that this case will require an operation and the other one be subjected to medical treatment. The time has almost arrived when the public realizes that surgery is for the sick and not for the dying, and many patients are aware of the great

<sup>\*</sup>Read at regular meeting of the Nashville Academy of Medicine, Tuesday, Jan. 19, 1915.

danger of a delayed operation. The death rate in every community is still inexcusably too high and an early diagnosis is the only way to lower it; the great difficulty is to get the men who see only one or two cases a year to recognize the danger signals before it is too late.

A few years ago the patients or the laymen were as a whole very much opposed to any operative procedure whatever, and the general practitioner halted to see what the result of general treatment would be; to-day the very word "Appendicitis" is beginning to mean to them an operation as the only safe and sane method of treatment. They have advanced far along the line toward the ideal treatment of the disease, and many of them recognize the symptoms that make the diagnosis. There was a time when fate vested the ability to recognize early peritonitis only in surgeons, and in a very few of them, but now every practitioner should be able to make the diagnosis, and he can do it if he will but try.

The charge that I bring against the general medical man is not incompetency, for they can almost to a man make the diagnosis and reach a correct conclusion. The fault lies in the fact that a careful examination was not made. The patient was not gone over systematically, one organ after another, section after section, after he had gotten a reliable history of the case; hence, a snap-shot diagnosis was made, and death from an unloaded, empty gun is the verdict. As an illustration, a short time ago I was asked to see a patient in consultation with one of those busy men. The patient had an uncontrolable diarrhœa of four weeks' standing that had resisted every kind of a Bismuth mixture with the opiates and all. I turned down the bed linen for an examination of the abdomen and found what? Elephantiasis of the scrotum in the ulcerative stage with general sepsis, and death the next day. This man is a good doctor; he just simply had failed this time to even look in the direction of the patient.

The surgeon has known all the time where the cause for the high mortality in peritonitis lies; but for fear of offending one of his friends, one who refers his work to him, he is content to accept the responsibility and meet the conditions as best he can. Far better would it be if he would be candid and frank with the physician, and show him wherein he has failed to interpret aright the symptoms of danger. He only sees a few cases each year perhaps; and he is not on the lookout for this condition that is so much dreaded by the surgeon. The symptom complex is nearly always a typical one; and if we would go over them with him, in connection with the case in hand, it would be a mutual benefit to all, and could not help but result in greatly reducing the mortality and the morbidity of this disease. My limited experience has been that they can make the diagnosis; but like they are in regard to cancer, they don't want to call it that until the last moment; peradventure that it might be something else.

Peritonitis is not an obscure or mysterious disease, but is one with which anyone can become acquainted, not only with the symptoms and diagnosis, but with the pathology and treatment as well. We hear much said about two classifications of the disease, local and general. When the real facts are, that one is only an early or late stage of the other. In other words, one might almost venture an opinion that no peritonitis is general in its origin. There is a focus from which the disease proceeds; and whether that focus is to remain localized or become generalized must depend upon accidents associated with the nature of the infecting agent and the rapidity with which it progresses—the less acute the one and the slower the process of advance, the more likely is the result to be localized peritonitis.

The real point of confusion enters when the peritonitis at the focus of infection advances considerably before a limiting check is reached; so that, for instance, it might happen that, in certain cases, a considerable part of the lower peritoneal cavity would be involved. In many appendiceal affections, and in inflammatory diseases of the female pelvic viscera, this more extended involvement of the peritoneum is met with; and when so encountered is frequently described as a case of general septic peritonitis. It is not easy in many cases of this class to say beforehand that the case is not one of general peritoneal infection, for the whole abdominal parietes may be rigid and tender to pressure.

These cases are very amendable to treatment, and if the abdomen should be opened we would find that the process had been walled off and confined to the pelvis, and these local conditions are held in check by the limiting adhesion and never involve the entire cavity, while others begin at a focus and spread unchecked until the entire serous surface is involved. The local slowly merging into the general are at times so rapid, the virulence of the infection being so great or the defensive action of the patient so slight, that no limit or check of the disease can be noted. Hence, we will have to admit that it is impossible to make the distinction between the two, but they will have to be treated as different stages along the progress of the disease.

The peritoneum is practically an analogue of the skin, and has been computed to be about equal to it in surface area. It covers, to variable extent, almost all the abdominal viscera; and so provides a protection for them, and a means by which those that are mobile can harmlessly move the one over the other. In the male the peritoneum forms a completely closed cavity; in the female the Fallopian tubes open into it.

The peritoneum is abundantly supplied with blood vessels and nerves; but its degree of sensibility to mechanical and chemical impressions varies considerably. Thus, the peritoneum forming the mesenteries, mesocolon, and that lining the abdominal parietes is very sensitive. The peri-

toneum secretes just sufficient material to lubricate its surfaces; but when congested or inflamed pours out an abundant serous exudate. Absorption is freely exercised, and this much more markedly in the upper than the lower abdomen; it is probably freest on the under surface of the diaphragm.

There is no reason to assume that the peritoneum differs from other lining membranes in being less liable to inflammation when unduly irritated; nor need it be supposed that inflammation when it attacks it differs in any material respect from similar processes elsewhere. Its becoming inflamed under any circumstances should be regarded as partially a protective process. It is Nature's effort to counteract and to inhibit the incursion and onslaught of invading forces which are inimical to the general welfare of the system as a whole.

The chief interest about an attack of acute peritonitis centers in the mode or source of infection. As far as is known, there is no such thing as an acute specific infection of the peritoneum, as a whole; that is, independently of any disease elsewhere; there is always a definite focus from which the inflammation starts. Further, everything tends to show that it is the presence of a particular microbe in the general peritoneal cavity that excites the inflammation; or, in many instances, the infection is mixed; that is to say, caused by two or more of the micro-organisms. The virulence of any attack will depend both upon the quantity and quality of the micro-organisms finding their way into the general peritoneal cavity; and probably also upon the resisting powers possessed by the host.

How do these micro-organisms gain access to the general peritoneal cavity? In the case of the female, they can easily do so by way of the Fallopian tubes; and it is by this route that such microbes as the gonococcus, the pneumococcus, and the pus-producing organisms probably do. Under all other circumstances, they must either make their

way through the unbroken surfaces of the peritoneum, or be ejected through some perforating lesion of a viscus. There is no difficulty in understanding the latter process, but in the former case we must assume that the serous coat has been damaged by an inflammatory process which has started from within; and, by extension outwards, impaired the protective properties of the membrane.

When inflammation arises from a gangrenous or ruptured appendix, or an inflamed bowel, it is usually the bacillus coli communis that is the infecting agent, although other micro-organisms are often associated in the process.

The infection which arises from a perforated gastric or duodenal ulcer is, as a rule, not acute in its inception. but rapidly becomes so after six hours or more. If any doubt existed as to the universality of a bacterial origin of all cases of acute general peritonitis, it would be in the case of a perforated gastric ulcer; for, except that the ulcer is itself probably septic, the extravasated material is not necessarily so; and the peritoneal inflammation might be chemical in origin, due to the acid gastric juices. It is certainly remarkable, sometimes, how often, after the closure of a perforated gastric ulcer, that much turbid fluid is left in the abdominal cavity, and yet the patient makes an uninterrupted recovery. However, it may be, after all, that the peritoneum is able, by its own powers of secretion and absorption, to neutralize all organisms that are not in excess; so that the limited number of those present in the escaped gastric contents are not beyond the power of the peritoneum to overcome and effectually dispose of.

Peritonitis, which follows upon operations within the abdomen, no matter what for, is unfortunately one of the most fatal forms of the disease we encounter. Why it should be so it is difficult to explain, except that the introduction of such micro-organisms as the staphylococcus pyogenes aureus, or the streptococcus pyogenes into a healthy and unprepared peritoneal cavity is more than that

lining membrane can withstand. It has had no time to prepare its forces of defense to combat the onslaught of the army of invasion.

It has been already pointed out that the virulence and rapidity of an attack depend upon the quality and quantity of the infecting material; so that while the symptoms may be comparatively slow in their progress in one case, they may be extremely rapid and acute in another. But taking the case at the earliest stage, when it is possible to be certain that acute peritonitis exists, we may expect to find fairly distinctive local and constitutional manifestations.

Before we take up the local and systemic symptoms, it would be well to consider the importance of obtaining a reliable history of the case; and this would bring us face to face with the well-known diseases that proceed or act as the direct etiological factor in the production of the peritonitis; necessitating a diagnosis of appendicitis, pus tubes, cholecystitis, gastric or duodenal ulcer. They are the four gross or most common sources of infection, named in the order of their causative frequency.

If we can exclude any or all of these, then we consider the rarer cases; due to strangulation or obstruction from any cause, typhoid perforation, tubercular infection from the mesenteric glands, or by extension of any other infection process in the neighboring organs. We can't deal with peritonitis from any standpoint intelligently that does not take into consideration these lesions that form the focal point of infection; especially is it true when we come to the diagnosis, prognosis and treatment.

The local signs or symptoms are the following: the patient lies in bed in the dorsal position with the knees drawn up to relax the anterior abdominal wall; this attitude is significant, and there will be a general rigidity of the abdominal parietes, coupled with a feeling of tenderness to palpation in certain areas or all over the abdomen. The respiration will be costal, and any attempt to draw a

long breath will be checked by a sharp pain felt in the epigastrium and in the sides. The intestines being paralyzed, so in a state of paresis there will be in consequence neither passage of flatus nor of fæces; and as a consequence we have abdominal distention or tympanites. The temperature may, or not be raised, at the time of the examination; but the pulse is usually enfeebled and increased in fre-There will be loss of appetite, and vomiting may or may not be present, but it usually is at some stage of the The general appearance of the patient may suggest the gravity of the complaint, but often the facial aspect may be more or less natural. These four conditional symptoms—pains, rigidity, localized tenderness and rapid, weak pulse should be recognized and accepted to mean peritonitis. and should be treated as such. This is not true in every case perhaps, but it forms a safe working rule, and if you make a mistake it is not as fatal as it would be to fail to recognize this symptom complex as such.

When, however, a later stage is reached, these symptoms undergo considerable alteration, both locally and constitu-The abdomen may no longer be rigid: indeed it may convey a kind of dough-like impression to palpation, with great distention and complete absence of borborygmi or gurgling; pain may be inappreciable. In place of the abdominal parietes being flat and retracted, they may be distended and tympanitic. The face may assume the typical, so-called abdominal expression—the facies Hippocraticus; the complexion may have an ashen grey aspect; the eyes may be sunken, with dark, suborbital lines. The tongue may be brown, dry, and furred; and the vomiting of dark material may be constant. The patient's mental condition becomes lethargic, sometimes passing into unconsciousness and delirium. As the end approaches, the hands may become livid and cold, and the pulse uncountable. These later symptoms are usually regarded as toxic in character, indicating that the patient is gradually being killed by the absorption into the system of toxins, the result of the increased development, multiplication, and extension of the bacilli.

We are often called in near the end to find a patient with an abdomen so distended as to render it absolutely impossible to outline anything in it. A patient so restless as to be unable to remain quiet for a minute, with hollow, sunken, tired, wide-awake eyes, from which sleep has been absent for many hours. A mind clear and active to all that transpires about him, with lips that are red, parched and hot, made doubly so by continually sucking and swallowing cracked ice, which is only adding insult to injury.

By his side is a bowl into which he vomits quantities of dark green, foul, offensive fluid, that seems to come from some inexhaustible source. But why describe it further? We are only too familiar with the picture, and as we sit quietly by, meditating and pondering over the lost opportunity and the hopelessness of the situation, and the patient dies with an overwhelming toxemia.

Treatment:—We have seen from an investigation of this subject that a rational treatment depends upon the recognition of the underlying causes, and when the primary lesion or focus can be determined, our treatment should be directed to the relief in so far as possible of the etiological factor. Our chief aim should be when a diagnosis is made to prevent the spread of the disease over the entire abdominal cavity, and assist nature as far as possible to localize the inflammatory process. This we can best accomplish by taking advantage of the principle of placing the parts at rest, by putting the patient in bed. We not only want to have bodily rest and quietude, but we want to control the normal peristalsis of the bowels; nature tries to splint that part of the alimentary tract, and keep it still till adhesion can be formed that walls off the infected area; and fluid or drink should be withheld, for the moment either is put into the stomach peristalsis is at once excited.

This is the view advocated by Ochsner, not as a cure for peritonitis, but only as an aid to prevent its spread. It is a method of treatment that has been much misunderstood; and has caused a great number of deaths; because the doctor was lulled into security by expecting too much from it. far beyond what Dr. Ochsner ever claimed. After rest, comes the relief of pain, rest alone with the avoidance of any pressure on the painful areas will often be sufficient to give marked relief, but it is nearly always necessary to supplement this with other measures. The best of which is the application of ice to the part; it should be applied continuously and not heavy enough to cause pain by pressure. We cannot mantain with certainty that this application of cold does more than relieve pain, but clinical experience gives some ground for the belief that when continuously applied it checks peristalsis, and in some other way favors a limitation of the inflammation. But we find some patients that after a thorough trial, complain bitterly of the cold, and instead of easing the pain it seems to increase it. Hot applications should be substituted, and many times give relief. It is often necessary to supplement the action of the local applications by pain relieving drugs, opium or morphine.

As a heritage of that rather recent period, we have the dictum, "Don't give opium, it masks the symptoms." The diagnosis having been made, is it not fair to ask just what good are symptoms to a patient after they have given the alarm and signaled where the fire is located? It is quite as logical to propose to do nothing if a house were aflame until the engines arrived. Begin immediately, systematically to combat the fire and to put the valuables out of harm's way in case it spreads.

From a dose of opium or morphine we get most prompt and grateful relief of pain, and often, too, their power of checking peristalsis is of distinct benefit. On the other hand, the relief of pain may give a false sense of security to patient and physician, and lead to a failure to recognize unfavorable developments in the case until valuable time may have been lost. Morphine should, therefore, be used cautiously, in as small amounts as will secure the desired relief, and the medical attendant should be on his guard against being misled by its masking of symptoms. The decision for or against its use, and as to the dosage, must be made in the individual case only after a careful weighing of these considerations; and it never should be given in amounts sufficient to stupefy the patient or to cause paresis of the bowel.

There seems to be an idea prevalent in the minds of the laity as well as the physician, that no matter what the malady is, free purgation is the one thing indicated above all others, and the routine practice is to administer some favorite purgative upon all occasions, and the more severe the symptoms the more active must be the remedy.

Almost from the beginning of time man seems to have been possessed of an intuitive feeling that if he has pain in the belly it is something that can be purged out, and he immediately resorts to the use of purgatives to bring about the desired end, namely, a free movement of the bowels. and unfortunately this intuitive feeling is so deeply rooted in the mind of mankind that even the study of the science and art of medicine at times fails to dislodge it. opinion is chiefly in accord with Ochsner in his strong condemnation in any case of peritonitis, especially so in the acute stage of the disease, until the condition has run its acute course or has been relieved by operation; the profession is a unit in its opinion that it can have no other than disastrous results, and they unite in recommending that the bowels be left undisturbed, or that as occasion arises they be cautiously moved by a small enemas. The increased peristalsis produced by purgatives defeats nature's efforts, by not only breaking up the delicate circumscribing adhesions, but also favors and aids the distribution of the infection throughout the entire cavity of the belly. It is a difficult problem to remove from the minds of the profession the idea that they are dealing with a condition that can be relieved by purging, or that if the bowels would move the patient would be better. If they could hold an autopsy, or these well meaning, but misguided, men would follow a few cases to the operating table and observe the exact pathology that they are trying to treat, the object lesson would never be forgotten; and the futility of their attempts would be apparent to the most enthusiastic follower of this line of thought.

One of the things to be employed in the treatment of nearly every case is the Murphy drip of the normal salt solution by the bowels. Many things are accomplished by its use. First, it relieves the intense thirst of the patient by supplying the necessary fluid to the system. It is absorbed into the blood, dilutes the toxins and very greatly favors their elimination by the kidneys. The greatest good it does is to increase the blood pressure until it transforms the peritoneum from an absorbing to an eliminating membrane; thereby limiting the absorption of the toxic material from the free peritoneal cavity.

Rosving has proven this to be unquestionably true, and it is applicable to every case. It is easy to put into effect and is always at hand, requiring no special aparatus.

When to operate is the most difficult problem to settle in regard to the treatment of peritonitis. Any differential discussion as to time to operate in peritonitis based upon symptomatology has been an utter failure. Perhaps eighty per cent of the cases taken consecutively will get well with the expectant plan of treatment, but there has never been any definite rule whereby the physician can select the case that will get well and the one that will die. Dr. Price, of Philadelphia, answered this question several years ago, and consistently lived up to his surgical convictions with a mortality in peritonitis that challenged the world. His dogma

was "operate the first hour at any stage." Any deviation from the first hour operations in peritonitis establishes in the mind of the physician a precedent which permits him to view with an alarming complacency a rapidly progressive and often fatal condition.

Permit me to ask this question, has any one ever lost a patient from too early operation? Or, putting it in another way, has any one ever regretted operating in the early stages? This forces another question, do we ever operate too late in peritonitis? The answer, I daresay, is a sad one to everyone present.

The man who adopts the first hour operation will have much to console him, if followed exclusively for a life time, and it is equally true that he who waits for a certain stage, or a quiescence in peritonitis; or is driven to it in desperation reaps more peritonitis and a harvest of death. I would not be understood to advocate operation in every case; here again we have to take into consideration the causative factor or the primary focus of the disease. If it is a result of a perforating gastric or duodenal ulcer, the case unless operated on and the perforation closed within the first twelve hours is in almost every instance a fatal one. same is true of typhoid perforations also. If the primary focus is the appendix unless the attack is exceedingly mild, I believe the case is an operative one. If it is due to pelvic infections or gall bladder disease, we can with less apprehension sit by and await developments. The cases where we have exaggeration of the four cardinal symptoms, one or all of them combined, will in the majority of cases be sufficient to base an opinion for immediate operation. Severe pain, or pain that is difficult to relieve, marked tenderness, local or general, excessive rigidity, extreme high temperature, uncontrollable vomiting, or cases in which we have evidence of great shock, should always be looked upon as signals of danger and nearly always signify that operation is imperative.

### NUGGETS FROM MINES DELVED IN, BY WILLIAM F. WAUGH, M. D., OF CHICAGO. ILL.

"No science is making vaster and swifter strides than that of healing, that strange mingling of science and of art."—G. H. Bogart Medical Herald.

"Barium sulphate is being substituted for bismuth in X-ray examinations, the former being harmless; but it must be chemically pure."—A. N. Doerschuck, Medical Herald.

Since June, 1914, thirty cases of bubonic plague have been detected in New Orleans, the last one in October. Of 260,000 rats examined, less than 250 were infected.

Sellers (*Texas State Inl.*) asserts "that the only permanent cure for trifacial neuralgia is extirpation of the gasserian ganglion. However, he gives place to deep alcohol injections." Why not take the medicine internally and let it sorter saturate in till it reaches the nerve?

"Fifty per cent of backaches are due to defective balance; as shown by lateral curvature, a flat back and a slumped position or exaggerated curve."—L. W. Littig, Med. Herald.

"Backache due to defective posture is best treated by a good corset, and by proper calisthenics and gymnastics."—Littig, Med. Herald.

"Of backaches, 6 per cent are due to plevic disease, 25 per cent to trauma, 15 per cent to arthritis."—Littig, Medical Herald.

"There have always been plenty of people who clung to the coattails of medicine, to the end of impeding its progress."—Medical Herald.

"Important vegetable drugs growing wild in the U. S. include dandelion, barberry, burdock, angelica, digitalis, juniper, larkspur, stramonium, yellow dock, elder, valerian, hydrangea, lungwort, clover, couch grass and pomegranate."—Med. Herald.

If lepers should be segregated, how much more the tuberculous? Wanted—some tropic isle, with perpetual summer, sunshine, fish, oysters, and seabirds' eggs galore, juicy fruits, pellucid lagoons, cocoa plants!

How very little is the progress made by the human race along the path of possible development. There are so many obvious advances, that nobody has made any serious move toward inaugurating yet.

People are just beginning to realize what delightful and health-giving homes for the summers are afforded by the shores of the Great Lakes.

The use of alcohol, tobacco and 'dopes" is due to the craving for relaxation. Better give a wholesome form by letting the wife and kiddies have their summers in the open.

The Ohio State Medical Journal seems to be getting almost human of late. For instance, it has discovered that advertising is valuable to the journal and to its readers. Really?

"To tell the truth nicely, as far as necessary for a safe and sound prognosis, one must know what he is talking about."—Paul Paquin, Med. Fortnightly.

"Bile production is lessened by potassium iodide, calomel, atropine, mercury bichloride and codium bicarbonate."—
H. A. Elkins, Med. Fortnightly.

"Bile production is increased by sodium salicylate, turpentine, and sodium chloride."—Elkins, Md. Fortnightly.

An Eastern specimen fears that after the war the Germans may not welcome the Americans and their dollars at the post-graduate schools because we do not sufficiently symptahize with them. Don't worry.

"The warning symptoms of tuberculosis are slight, inconstant, indefinite, unstable, sometimes very difficult of interpretation, and in incipiency can often pass for common, self-curable indispositions."—Paul Paquin, Med. Fortnightly.

"Early tuberculosis in children:—Malnutrition, shrinking muscles, habitual headaches and epistaxis, early excessive

brightness, chronic tonsilitis and bowel troubles, enlarged glands especially the submaxillary and axillary, lassitude, indifference to duty, earache, decaying teeth, excessive hair growth, persistent bronchial irritations."—Paquin, Med. Fortnightly.

"Early Tuberculosis:—Cough lasting over two months; frequent attacks, fever, grip, evening rise; blood spitting—tubercle in 90 per cent; pleurisy 70 per cent; night-sweats; falling weight and strength."—Taliaferro, Charlotte Med. Journal.

Now that cancer is acknowledged to be at first a strictly local disease, the urging of early operation is a duty.

"Ether and chloroform being lipoid solvents, their use is apt to occasion an outburst of pellagra symptoms in those affected."—R. T. Dorsey. Atlanta Jour.-Record.

"Pellagra:—Bring the lipoids into solution and then eliminate them. Avoid excess of fats, sweets and non-nitrogenous vegetables."—Dorsey, Atlanta Jour-Rec.

"Hodgkin's Disease:—Vrey good results follow regulation of diet, use of iron, bone marrow and cacodylate, iodine locally and X-ray exposures.—L. C. Rouglin, Atlanta Jour.-Record.

"The peripheral nerve terminals that form a close network in the skin, are sharply stimluated by the rays of the sun."—Le onde Med.

"The human flower is the one that stands most in need of sunshine.—Michelet.

"The sun is the basis of all manifestations of organic life; it is the sun that energizes the world and maintains the infinite marvel of the seasons."—Flammarion.

"What poets sing, what proverbs teach, doctors must not ignore; heliotherapy remedies an obvious lapse in our therrapeutic arsenal."—Castaigne.

There is a modern fad that deserves exploitation as much as heliotherapy—exposure of the whole surface of the body to the sunlight.

Were we to contemplate starting a sanatorium for tuberculosis we should so locate it as to give adequate chances to practice heliotherapy.

"The prevention of post-operative gas, pains and vomiting, and of shock, the quiet rest for hours, the improvement of the circulation, have combined to convince me that the use of morphine and hyoscine marks an era for decided improvement of conditions in the practice of surgery."—

J. M. Inge, Texas Med. Journal.

Acidosis, normally overcome by the liver and adrenals, when these do not share in the neutralizing process of restoring the alkaline condition, results in serious trouble for the surgeon."—J. M. Inge, Texas Medical Journal.

"The value of proper advice to parents from infancy upwards is far more potent and practical than what to do when disease appears."—Crothers, Texas Med. Jour.

According to M. M. Carrick (*Texas Med. Journal*) "sickness and death cost the State of Texas \$30,000,000 last year from preventable disease alone."

# Pbituary.

DR. J. C. ABERNATHY, patriot, soldier, physician and pioneer citizen of Birmingham, Ala., died at his residence in that city, February 27, ult. Until a short time previous he had been in the best of health, notwithstanding his advanced age. Retiring in his usual health on Saturday night, his venerable wife on calling him for breakfast on the following morning found that he had answered the last earthly summons, the end having come peacefully during the night.

He was born in Marengo County, Ala., September 6, 1835; the son of a Methodist minister who settled in that county in 1822. He received his degree of M. D., from the University of Louisiana, now Tulane, in 1859. He was commissioned Surgeon of the Thirty-second Regiment. Ala-

bama Infantry, early in 1862, subsequently transferred to the Forty-third Georgia Regiment, serving with it until the surrender of Genl. Jos. E. Johnston's Army at Greensboro, N. C.: and was in every engagement fought by the Army of Tennessee from the battle of Murfreesboro until the close of the war between the States, ever faithful in his duty day and night, gaining marked distinction for his earnest and efficient services. He was President of the Association of Medical Officers of the Army and Navy of the Confederacy, 1908-9. Hs was an ex-President of the Jefferson County Medical Association, and an ex-Commander and one of the founders of Camp Hardee, U. C. V. His wife (nee Miss Caroline Mobley, of Wilcox Co.) and six of their eight children, two daughters, Mrs. Chas. Northington of Tuscaloosa, Ala., and Mrs. Henry Parks, of Sylvester, Ga., and four sons, Judge H. B., Will H., and Thos. S. of Birmingham, and J. C. Abernathy, of Houston, Texas, survive him; to whom, and his many friends we desire to tender our most sincere sympathies.

### Reviews and Book Notices

STUDENTS' MANUAL OF. GYNECOLOGY. By John Osborn Polak, M. Sc., M. D., F. A. C. S., Professor of Obstetrics and Gynecology, Long Island College Hospital; Professor of Obstetrics in the Dartmouth Medical School; Gynecologist to the Jewish Hospital; Consulting Gynecologist to the Bushwick, Coney Island, Deaconess' and Williamsburg Hospitals, Brooklyn, and the Peoples Hospital, New York; Fellow American Gynecological Society, etc. 12mo, 414 pages, illustrated with 100 engravings and 9 colored plates. Cloth, \$3.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The plan and arrangement is orderly to a marked degree. The opening chapters deal with the physiology of the various genital organs, with puberty, menstruation, ovulation and menopause, with discussion of hygienic considerations.

Chapters on general gynecological diagnosis serve as an introduction to the detailed consideration of the various

gynecologic operations to which the book is largely devoted. Under each disease the pathology, the symptoms, diagnosis and treatment are presented fully and in sequence. Salient facts are emphasized. The full directions for treatment are a feature of marked value, and embody the best present-day practice.

While the author is evidently familiar with the literature of this department, he has based his work largely on personal observation, and has made accessible in small compass all the essential data required by the student and all that is demanded of a working manual for the general practitioner.

The facts that modern medical science has definitely established are plainly set forth. The pathology of the various disorders is adequately considered, and emphasis is laid on diagnosis and treatment. Indications for surgical intervention are fully presented, and a step by step description of the usual gynecological operations enables the student readily to assimilate the procedures and technic, or the practitioner to refresh his memory quickly on any doubtful point.

CANCER, ITS CAUSE AND TREATMENT. By L. Duncan Bulkley, A. M., M. D., Senior Physician the New York Skin and Cancer Hospital. 8vo. Cloth, 224 pages. Price, \$1.50, net, postpaid. Paul B. Hoeber, Medical Publisher, 67-69 East Fifty-ninth Street, New York.

Cancer has hitherto been regarded almost wholly from its historical and surgical aspects. But relatively little attention has been paid to the dietectic and medical aspects of this most threatening malady, although voices have been raised from time to time, with more or less force, claiming that the basic cause of the disease is constitutional, and that it depends largely on diet and mode of life.

In the present book the author has collected from literature and analyzed the evidence of the constitutional nature of cancer, and presents his own experience in its dietetic and medical treatment, during the past thirty years, with reports of cases.

As cancer is steadily increasing the world over, with a mortality of fully 90 per cent of those once affected, and with over 50,000 deaths from this disease in the United States in 1913 (an average of twelve deaths from it daily in New York City), this contribution to the solution of the cancer problem is most timely and should be highly welcomed by the profession. While early operative procedures have given the most satisfactory results in this terrible disease, there is a large field of usefulness by means of dietetic and medical measures that will materially aid or supplement the work of the glistening scapel, therefore we can and do most heartily commend this most excellent series of lectures by an authority. The six lectures are considered under the following headings: "Nature of Cancer." "Frequency and Geographical Distribution of Cancer," "Metabolism of Cancer," "Relation of Diet to Cancer," "Medical Treatment of Cancer," "Clinical Considerations and Conclusions."

INFANT FEEDING, ITS PRINCIPLES AND PRACTICE. By F. L. Wachenheim, M. D., Attending Physician Sydenham Hospital and Mount Sinai Dispensary, New York City. 12mo, 340 pages. Cloth, \$2.00, net. Lea and Febiger, Publishers, Philadelphia and New York, 1915.

The author has accomplished the monumental task of carefully considering the enormously extensive literature of this subject and presenting in readily available form the ultimate conclusions of the world's leading authorities and the most successful present-day practice.

In the preliminary chapters a clear presentation of facts regarding infant digestion and metabolism opens the way to easy grasp of the detailed information. A point of interest is the author's demonstration of the extent to which the capacity of the infant's stomach is underestimated. Enlightening data is presented regarding protein, carbo-hydrate, salt and particularly fat metabolism. After

reviewing fully the problems of breast feeding, Dr. Wachenheim concludes that even in cases of serious digestive derangement, if the supply is adequate, the only safe procedure is to keep the child at the breast.

The bacteriology of milk; milk infection; the constituent elements of cow's milk and the essential difference between it and human milk; milk regulation and the feeding of whole milk, are treated at length.

The formulas presented are readily adaptable to the individual requirements of the case in hand. The cause, symptomatology, diagnosis and treatment of digestive and metabolic disorders are considered at length. A section on the feeding of older infants up to four years brings the work to a logical conclusion.

THE SO-SO STORIES, a series of humorous stories of interest to physicians, illustrated. pp. 104. Cloth. Reed & Carnrick, 42-46 Germania Avenue, Jersey City, N. J., Publishers, 1914.

Owing to the increasing demand for copies of these stories, Messrs. Reed & Carnrick have published a limited edition, bound in cloth, and will take pleasure in forwarding you a copy on request. It will only cost you a postal card or a 2-cent stamp—so just send for a copy and get the wrinkles out of your mind by a "series" of laughs and smiles.

<sup>&</sup>quot;THE CURATIVE ACTION OF RADIUM." By Sigm. Saubermann, M. D., of Vienna and Berlin. Fifty pages with 35 half tone illustrations. Published by Radium Limited, U. S. A., 25 West Forty-fifth Street, New York, N. Y.

Dr. Saubermann is one of Europe's greatest authorities on the Radium Emanation Therapy, and in this booklet he voices the results of his research work covering a period of over eleven years. It is of great intrest to all physicians desirous of using radium emanation in treating those diseases which it influences.

The thirty-five illustrations contained are in all probability the first of their kind ever shown in this country, and demonstrated clearly the effects of the rays and emanation of radium.

The booklet will be sent free to our readers on application to the publishers by mentioning the name of the Southern Practitioner.

## Editorial.

#### ANNUAL MEETING OF THE STATE MEDICAL ASSOCIATION.

As stated in our last issue, the eighty-second annual meeting will be held in Nashville, Tuesday, Wednesday and Thursday, April 11-13. The hall of the Y. M. C. A. building, corner of Seventh Ave., N., and Union Street has been secured for the meeting; commodious, central, easily accessible and in every way most eligible. We give below the Preliminary Program, of which the President's address, by Dr. S. M. Miller, of Knoxville, and the "special addresses" of Drs. Frank Billings and E. C. Rosenow, of Chicago; J. M. T. Finney, of Baltimore, and J. W. Frask, Assistant Surgeon-General U. S. P. H. Service, alone should justify the attendance of every member of the association who can possibly attend. The members of the local profession will extend the courtesies of a dinner, complimentary to the distinguished visitors on the evening of the second day. The largest meeting in the history of the Association is most confidently expected.

Emesis—A Symptom—George R. West, M. D., Chattanooga.

A Paper-Battle Malone, M. D., Memphis.

A Hoary Headed Heresy-W. K. Vance, M. D., Bristol.

Duodenal Ulcer-J. S. B. Woolford, M. D., Chattanooga.

A Paper—J. McC. Hogshead, Chattanooga.

A Translation of the Summing Up of 5,000 Cases of Scopolamin-Morphine Anæsthesia in Labor, by Le Quoux—J. M. Trout, M. D., Knoxville.

The National Antinarcotic Law; What It Requires of Physicians—G. E. Petty, M. D., Memphis.

Moving Pictures of Orthopoedic Cases—W. C. Campbell, M. D., Memphis.

Medical Jurisprudence—I. A. McSwain, M. D., Paris.

Pyloric Stenosis of Infants-O. W. Hill, M. D., Knoxville.

A Paper-E. M. Holder, M. D., Memphis

The Surgical Treatment of Gastric and Duodenal Ulcer-R. A. Barr, M. D., Nashville.

The Hospital Situation in Tennessee—E. C. Ellett, M. D., Memphis. A Paper—E. J. Johnson, M. D., Memphis

Importance of Early Recognition of Minor Surgical Conditions— C. P. Fox, M. D., Greeneville.

Morphin-Hyoscin Analgesia in Labor, with Report of Cases—J. W. Brandau, M. D., Clarksville.

Skin Grafting-J. L. Crook, M. D., Jackson.

Bad Results of Colles and Potts' Fractures and How to Prevent Same—Duncan Eve, Jr., M. D., Nashville.

A Paper—T. G. Pollard, M. D. Nashville.

The Heart in Acute Infectious Diseases—W. H. Witt, M. D., Nashville.

Colossal Goiters (Ilustrated)—W. D. Haggard, M. D., Nashville. Further Consideration of Autumnal Pneumonia—Frank A. Jones, M. D., Memphis.

Surgical Diagnosis-E. Dunbar Newell, M. D., Chattanooga.

The Treatment of Syphilis-Perry Bromberg, M. D., Nashville.

Fractures Without Pathognomonic Signs—J. F. Gallagher, M. D., Nashville.

A Paper-E. R. Zemp, M. D., Knoxville.

Epidemic Otitis Media—A Study of Its Manifestations—Richmond McKinney, M. D., Memphis.

Sera and Bacterins as Prophylactic Agents—H. H. Shoulders, M. D., Nashville.

Who Should Study Medicine—A. F. Richards, M. D., Sparta.

A Case of Orthodontia—Gordon White, D. D. S., Nashville.

Sporotrichosis—H. F. Friedman, M. D., Nashville.

The Epilepsies-J. W. MacQuillan, M. D., Chattanooga.

Vertigo—S. S. Crockett, M. D., Nashville.

Diagnosis of Syphilis of the Nervous System—A. W. Harris, M. D., Nashville.

The Tendency Toward Drug Nihilism—Hy Lockhart, M. D., Coalmont.

Dental Sepsis—X.Ray and Clinical Reports—Jack. Witherspoon, M. D., Nashville.

Psychoses of Drug Addiction-W. R. Wallace, M. D., Memphis.

Presidential Address—S. M. Miller, M. D., Knoxville.

Special Address-Frank Billings, M. D., Chicago.

Special Address-J. M. T. Finney, M. D., Baltimore.

Special Address—E. C. Rosenow, M. D., Chicago.

Special Address-The Relation of the Practicing Physician to the

Public Health—J. W. Trask, M. D., Assistant Surgeon General U. S. P. H. Service, Washington.

Chronic Leg Ulcer-W. Scott Farmer, M. D., Cookeville.

A Paper-By Owen H. Wilson, M. D., Nashville.

A Paper-By R. E. Fort, M. D., Nashville.

Tubercular Meningitis—Report of a Case—K. S. Howlett, M. D., Franklin.

Some Pertinent Points in Vascular Surgery—Report of Cases— E. T. Newell, Chattanooga.

How Shall We Treat Appendicitis?-M. C. McGannon, Nashville.

Stasis-Jos E. Johnson, M. D., Memphis.

Prostatectomy (with Lantern Slides)—Robert Mann., M. D., Memphis.

The Use of Autogenous Serum in Certain Skin Diseases—J. M. King, M. D., Nashville.

#### THE JAW-BONE OF AN ASS.

They have troubles in the good State of Indiana as well as in Tennessee. The March issue of The Journal of the Indiana State Medical Association is congratulating its readers because the Legislature has adjourned. Ah, well! We can have cause for like gratification in a few days more. It seems from the "Notes and Personals" of our contemporary that they have been burdened with a freak among their solons, in the preson of one Fritzie Feik, representative for DeKalb County, "a sad commentary on the judgment of the voters" of said county, who has been endeavoring to cripple the important work of the State Board of Health, taking special delight in opposing all public health measures because of personal dislike of certain members of the Board. The following is a brief specimen of his scintillating argument against the very efficient Secretary of the Board, Dr. J. N. Hurty, who has served his State and his people so effectively and so well for twenty years, by his faithful and earnest devotion to duty:-"What does this man do? He goes around the State of Indiana telling the farmers of this State that they are dirty. I am in favor of cutting out the whole business."

And sad though it be, the records of our own present Legislative Assembly show that the first bill introduced in the House of Representatives, yes, "House Bill No. 1," was to "Repeal the Vital Statistics Act" of a preceding Legislature. Yes, this "nincompoop," with more jaw-jingle than brain brillliancy, in his great wisdom! so sadly misrepresenting the interests of his constituency, would destroy the important measure secured with so much difficulty, after so great, earnest and sincere efforts of some of the most intelligent citizens

of this great State; emasculating the work of the State Board of Health.

Atfer more than thirty years of weary work to the best of my humble ability, aided and assisted by more able and eminent colleagues biennially, I have witnessed the beneficent results thus secured from the measures put in force by our State sanitary authorities; notwith-standing the opposition of those "dressed in a little brief authority" as lawmakers, who should have known better; submitting to their jeers and jibes; to their unfounded assertions "that all such measures were in the interest of a trade's union of the doctors;" that they were advocated and urged by the doctors because they would be greatly benefited thereby, etc., et ad nauseam.

Ah, well! I have heard in the days of yore, and not so very long ago, either; that the good citizens of this up-river county so sadly represented by this wonderful "Lycurgus," still voted quadrennially for Andrew Jackson or John C. Calhoun, or possibly for Polk or Clay: objecting strenuously to modern methods of casting their ballots, preferring their own way of using white or red corn corbs to show their political preference.

My personal recollections carry me back to the last Legislature elected at the close of the first half of the last century. I was in my novitiate then and boarded at a house just east of our then new State Capitol building, not quite completed. I was then as now, an early riser. An up-river boat had brought down the night before the representative of this same county. I was sitting at the breakfast table alone eating when he came in and took his seat at the table. colored waiter had gone to bring his breakfast. While awaiting it he saw a bottle of pepper sauce on the table-I guess it was the first he had ever seen, he being more accustomed to the pepper in the pod. The vinegar was all out of the bottle. Taking it up, turning it over and over in his hand, seeing the bright green and red pepper-corns. he took up his fork, pried out the partially perforated stopper, shook half a dozen pepper-corns out on his plate; then taking one of them into his mouth he began masticating, but very soon he turned it out again onto his plate, saying: "Lay thar, gol-darn ye, 'til ye git cool!" Oh, yes, there were "giants" (of intellect) "in those days" as well as now.

CREOSOTONIC (Scott):—The ideal systematic antiseptic, invaluable in Tuberculosis, Bronchitis, Pneumonia, Asthma, Catarrh, and as a tonic after exhausting and wasting diseases. The Dawson Pharmacal Co., Dawson Springs, Ky., will send you sample and literature on request.

#### THE PANAMA CANAL AND ITS COMMEMORATION.

The "Great Ditch" having been dug from ocean to ocean, its massive gateways swinging to and fro in behalf of a world's commerce, those other gateways of the great Exposition of our Golden West have also been duly opened and are daily thronged with eager and interested vistors. Notwithstanding there was some slight degree of disappointment that the great enterprise was not formally opened by our Chief Magistrate, owing to pressing and important duties at the seat of government, his worthy substitute, the next in rank of our national officials has discharged this duty in an eminently satisfactory manner.

The stupendous military strife and struggle, the terrific holocaust of "grim visaged war" now pervading the European Continent, doubtless will prevent the possibility of a large number of visitors from the "Old World;" however, Janus having also placed his barrier to our own numerous "globe trotters," they can well avail themselves of the great opportunity that will be open to them from now until December next to see and learn something of their own "New World," spending their days and their dollars where they will do the most good to them and their fellow-citizens. Yes, indeed! "Go West, young man."

The annual meeting of our National Medical Association this year cannot fail to attract an unprecedented attendance—the low rates of transportation over various transcontinental lines afford the opportunity of a lifetime, and every doctor who can, especially the younger members of the profession should not fail to take advantage of it. The marvellous rebuilding of the grand city at the "Golden Gate" so soon after its almost complete destruction by earthquake and fire; grander, more substantial, more splendid and queenly than ever, amply demonstrate the great importance of opening a continuous waterway linking the Eastern shores of this great continent to those of the West; in which great event the medical profession was a most important, aye, an essential integer.

And yet there be pessimists in th land, "doubting Thomases," who predict that the canal can never be a success; that the yielding and unstable character of the sides of the great Culebra cut will continually give frequent and occasional trouble by land slides, resulting in delays and uncertainty in transmission that will be detrimental to commercial enterprise. Bah! Away with such silly suggestions. Even though the whole of Culebra and other hills adjacent be precipitated into the canal from end to end, completely filling it from "eend to eend," permanently closing it, every dollar of the many millions invested in the work will be a splendid investment, in that here has been demonstrated that those once terrible scourges, yellow fever and malaria, can be controlled. And then cannot our great peo-

ple in a few years build another and a better canal by the Nicaragua route; not only at less cost, but at sea-level, its slightly increased length more than compensated for by avoiding the necessary delays and expense of the gates and locks? And then we can have another commemoration, another great celebration—and so:—"On with the dance; let joy be unconfined."

#### "VIVISECTION OF A RACE."

There are horrors of war that we wot not of, commonly. All of us had thought that the whole story of Belgium's sufferings had been told, but it is not so. Dr. George W. Crile, famous for his studies of surgical shock and the discovery of methods to prevent it, recently delivered a lecture at the American hospital in Paris, in which he detailed a phase of Belgium's sufferings that had not been thought of by the lay mind.

Death, wounds, bereavement and destruction of property, Dr. Crile said, are not the worst of Belgium's ills. The effect of the long strain, he said, is manifesting itself on the whole people in an exhaustion of the central nervous system precisely like that which results in an individual who has been long under the knife. Men and women have aged in months, degenerative diseases that might have been deferred for decades have hurried to fatal culmination, and "the life of the people as a nation has been shortened, their vitality impaired and their future embittered."

Dr. Crile continuing said, that Belgians who have not been direct victims of the fighting show tissue changes in the vital organs, the full effects of which cannot be realized for years. He sums the whole thing up by calling it "the vivisection of a race."

The situation is horrible to contemplate. In the "operation" on unhappy little Belgium, there was no administration of an anesthetic. There was no "blocking off" of the nerves, as is now done in an operation on an individual. The poor patient has had to sustain the full surgical shock and, its nervous system shattered, must make its way through generations a distressed, depleted and desecrated invalid.

The deep hellishness of war is not yet understood.

CAMPHEDINE—A NEW IODINE PREPARATION:—C. A. Bryce, M. D., Richmond, Va., in the Southern Clinic, November, 1914, has the following: The writer has been using in his practice for a considerable time an iodine preparation put up by A. H. Robins Co., of this city, and known as Camphedine. The effects of this local remedy have been so remarkable and so satisfactory that I am impelled to call the attention of the profession to the same. I have used it under many

and varied conditions, and attribute its great therapeutic value to the fortunate properties of its vehicle, which permits the remedy to enter the tissues and blood stream, as it were, by osmosis, bringing about results immediate and satisfactory. Wherever the therapeutic properties of iodine are indicated, camphedine can be relied upon, minus the disadvantages of crude iodine. It relieves local pain promptly without local irritation; on the contrary, it can be applied to denuded or burned surfaces as an anodyne.

As an antiseptic dressing, it is equal to any, and without the dangers of most of them. In all cases where prompt absorption, or lymphatic stimulation is desired, it penetrates the tissues almost as soon as it is applied to the skin. Among many cases on my notebook, I will mention one of especial interest, because I attribute the happy relief of all symptoms to the free use of camphedine.

Early in the present year I was called to see a Mrs. B---, a frail little woman suffering from a recurrent attack of appendicitis. The symptoms were plain, positive and unmistakable, and she informed me that former attendants had urged the importance of operation. She was suffering severe pain, and her facial impression denoted reflex abdominal trouble. There was the soggy tumefaction over the appendix, pain and flexed limb on affected side. I put her upon a liquid diet, enjoined absolute rest and quiet and covered the right iliac quadrant with a saturated gauze of camphedine and kept it thus covered until she was entirely relieved, which occurred within twentyfour hours, so far as pain was concerned. In a week she was feeling entirely well and the tumefaction and tenderness was all gone. She has had no trouble since, and I am satisfied that there are many cases of recurring appendicitis that could be cured through the alterative, absorbent and antiseptic virtues of this remedy which finds its way so readily into the diseased tissues.

Should any physician be interested in the above, we will mail sample on request.

A. H. Robins Co.

200 E. Marshall St., Richmond, Va.

THE RECOVERY FROM LA GRIPPE:—Since the first appearance upon our shores of that unwelcome infectious disease known as La Grippe, the medical journals have been filled with articles advocating different methods of treating the attack itself and its various complications. But little attention, however, has been paid to the important question of how to best treat the convalescent subject. Among all of the acute infections there is probably none that is as likely to leave the patient quite as thoroughly devitalized and generally prostrated, as does a sharp attack of La Grippe. For some

reason the degree of prostration from grippal infection appears to be entirely out of proportion to the severity of the attack itself. This peculiarity renders it advisable and usually necessary to strengthen and support the general vitality of the patient during the period of convalescence. Complete rest, nourishing food, plenty of fresh air and stimulation according to indications are, of course, distinctly important measures. At the same time tonic and hematinic medication should not be neglected. Probably the most generally acceptable and efficient general tonic and hemic reconstituent for such patients is Pepto-Mangan (Gude), a bland, non-irritant and promptly absorbable combination of the organic peptonates of iron and manganese. This efficient blood-builder and reconstructive does not disturb digestion nor induce constipation, and is readily taken by patients of all ages.

ANEDEMIN TABLETS: - (Opposed to edema.) There is no other preparation, combination or therapeutic agent of its class, combining the active principles of Apocynum, Strophanthus, Squill and Sambucus, giving the same results as Anedemin. Physicians are cautioned against imitators, substitutes or inferior combinations. We give the above information for the benefit of our customers and will add that our remedy. Anedemin is composed of the very freshest drugs-scientifically prepared in such manner that any and all objectionable properties are eliminated—we give formula in full and all information pertaining to Anedemin, excepting our methods of treatment to the drugs used; this we retain in justice to ourselves and in view of the prolonged treatment, the class of drugs used, the real worth of Anedemin, we give the most liberal price to druggists who will supply physicians and their patients. Physicians who know Anedemin know competive preparations of cheaper character will not give the same results when all is properly considered. We furnish liberal working samples to physicians. Anedemin Chemical Co.

EXPERIMENTATION suggested the old-time, bacteria-breeding, quickly cooling flaxseed and bread-and-milk poultices.

Scientific Medicine evolved Antiphlogistine—scientifically compounded (under professional surveillance) of finely levigated, sterilized mineral earth, c.p. glycerin, salicylic and boric acids—the oils of mentha, gaultheria and eucalyptus—with a small amount of iodin compounds.

A poultice is a very useful thing, when indicated—the indication being the application of continuous moist heat without vesication.

A perfect poultice should be antiseptic—cleanly—of pleasant odor. It should maintain continuous moist heat for many hours; should be

hygroscopic (thus attracting water and relieving congestion by osmosis); indirectly and safely anodyne, physiologically active in restoring normal circulation.

For more than twenty years Antiphlogistine has met these requirements. It has become a Permanent Fact in Scientific Medicine.

A New Proteid-Silver Compound:—An agent for the treatment of acute inflammations of mucous membranes is being announced by Parke, Davis & Co., and promises to meet a real need in medical practice. It is soluble silver-proteid—an active germicide, astringent and sedative—and is offered under the name of Silvol. The product contains about 20 per cent of silver. It occurs in scale form, has a dark, metallic appearance, and is readily scoluble in water. Silvol solutions are not precipitated by proteids or alkalies or any of the reagents that commonly affect other silver compounds in solution. They do not coagulate albumin or precipitate the chlorides when applied to living tissue.

The use of Silvol is suggested in the treatment of acute gonorrhea and inflammatory affections of the eye, ear, nose, throat, vagina, etc. The product is supplied in bottles containing one ounce and in 6-grain capsules (bottles of 50). It is non-irritating and non-toxic in proper solutions.

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

GLANDULAR TUBERCULOSIS:—The indication for cod liver oil is so marked, of course, that the only question that will come up in regard to its use in such cases, is the most suitable form in which to give it. Inasmuch as so many of these cases are in young children, the need for a palatable product at once becomes a conspicuous feature.



Cord. Ext. Ol. Morrhuae Comp. (Hagee) in these cases will be found not only trustworthy as a therapeutic measure, but it also will prove agreeable and may be continued over long periods without causing distress.

SLEEPLESSNESS IN CHILDREN:—In the restlessness and sleeplessness of children *Pasadyne* (Daniel) is particularly well adapted to meet the therapeutic needs present.

Not only is *Pasadyne* (Daniel) dependable in its therapeutic application, but further still, it is the safest and most pleasant of the soporifics, which naturally is an additional reason for preferring it. A sample bottle may be had by addressing the laboratory of John B. Daniel, Atlanta, Georgia.

AN ADVANTAGEOUS ANODYNE:—The principal feature of superiority in *Papine* (Battle) lies in its maximum of anodyne effect with a minimum of untoward results. The explanation of this fact is to be found in the purity of *Papine's constituents*, and the extreme care taken in its manufacture. For use in women and children *Papine* (Battle) has a thoroughly distinctive value.

## Selections

THE DOCTOR—OLD AND NEW:—"It ain't so much what you know, as what people think you know that counts," said the old doctor, as he tilted his chair against the shady side of the piazza and stretched his long legs comfortably across the rail. "Now, I've been in practice over forty years, and naturally I've learned some things, but when I read some of these journal articles about things I never heard of, I feel as if I knew less every day. And," he added, after a moment's thought, "I don't know but I'm glad of it. There is such a thing as knowing too much. Now, there was Doctor M. He was so blamed scientific he forgot what he was sent for. I remember he was called to see an old patient of mine who had the worst kind of biliary colic, and the first thing he had to do was to get a history and write it down so he could report to some paper.

'How old are you?' said he. 'Say, Doc,' cried the man, 'don't mind my age! I've got a devil of a belly ache that's troubling me mostly now.' But he insisted that for a proper diagnosis he must know all about the attacks, and so, while the man grunted and swore, he kept asking and writing down how many attacks he had had, how long they lasted and what they followed. Then he began to ask if his father had such attacks, and then his grandfather, till the man yelled out, 'Say, my grandfather is dead. It's me that's got the belly ache.' He never made much of a hit with that family, but he did know a lot.

"He went once about nine miles into the country," continued the doctor, now in a reminiscent mood, "to see a man with the diarrhoea, and what do you think he gave him? A prescription, and the nearest drug store nine miles away, and it was raining, too! It takes more than book learning to be a success as a doctor. He needs a lot of common horse sense, and in all this chatter about higher education and a new curriculum—which is one way of freezing out competition in the medical college trust—I haven't seen mentioned any professor of common sense.

"Just now there seems to be a craze for operations, and the average patient with a choice between an operation and a dose of medicine seems to prefer the former. Down at the Hill the other day a lot of women were discussing appendicitis, and their idea of it was confined to the price of the operation and the length of the scar, and the one with the longest scar got the most for her money. I think it averaged about fifty dollars an inch.

"There was a time," he continued, "when the family physician was of some importance, and his opinions respected. His patients, if taken ill, sent for him and waited till he was able to come. His advice was followed and he had no thought of competition. Now the obligation is all on the other side; the doctor promises, for instance, to take care of a confinement and sacrifices two months of possible vacation waiting for his case, and then at the criti-

cal moment, because he will be delayed a half hour, another physician is called, with no thought of obligation to the first.

"If the doctors would quit squabbling amongst themselves and get together, they might better their lot and ease their labors, but as Sherman said, 'War is hell.' He died before expressing his opinion of the practice of medicine, but I tell you"—"Doctor, come to supper," cried his good wife, and he went.—Editorial Providence Medical Journal.

TREATMENT OF ACUTE NEPHRITIS:—Many authorities say that there is never a complete recovery following an acute nephritis. The cause of the condition is undoubtedly a factor. If it follows one of the acute infections it is more likely to terminate fatally. Where patients receive careful treatment, however, many recover absolutely, even when the amount of albumen is large and even when it has persisted for as long as nine months. Will these patients later again develop a nephritis? Perhaps, but many cases now under observation by the speaker show no increase in blood pressure, no hypertrophy of the heart, and are, presumably, in excellent health.

Relative to prophylaxis, patients suffering with acute infectious diseases should be kept in bed for a long time, on a restricted diet. Every possible focus of infection should be removed. Drugs, irritating to the kidney, should be avoided. Exposure to cold and passive congestion should be avoided in acute diseases. Drugs for the support of the heart are valuable.

The patient should be kept in bed, warmly covered, the kidney function lessened by increased work of the bowels. Calomel should be avoided as irritating to the kidney. Salts or Co. Jalap powder are good. Water is the best diuretic. Digitalis, especially the infusion, is an efficient diuretic in heart cases. When edema is present, water should not be pushed. A milk diet is preferable. It lessens the salt intake and has high caloric value.

Sweating, induced by the hot bath, with ice cap to head, is a valuable measure, especially in cases tending to uremia. Sweating and purgation care for the edema. For edema of the legs Southey's tubes, introduced under strict aseptic precautions, are good.

Hypertonus, especially with a transient aphasia or hemoplegia or monoplegia, due to spasm of the blood vessels, calls for the nitrites. In uremia the sweating and purgation should be pushed to the full. Morphin for convulsions. Venesection has been done. Venesection is also good in associated pulmonary edema. Cupping and hot application care for the backache. Morphin relieves the headache, or, lumbar puncture may give relief. For the anemia, Basham's mixture is the best. Sodium bicarbonate and magnesia are best for the vomiting.

The patient should be kept in bed until the kidneys have had an opportunity to get back to their normal condition. After recovery a warm climate should be advised. Infection should be guarded against, and the patient should be careful not to take cold. For these reasons, children, after an attack of acute nephritis, should be kept out of school for from one to three years.—Ino. Phillips, M.D., in Cleveland Med. Jour.

SODIUM CITRATE IN MILK:—Bosworth and Van Slyke, in the American Journal of the Diseases of Children, present the following conclusions:

- 1. The addition of sodium citrate to milk in infant feeding is a frequent practice in cases in which the use of normal milk results in the formation of large lumps of tough, indigestible curd in the stomach. The favorable results attending such use of sodium citrate have never been explained on the basis of actual investigation.
- 2. Work previously done by the authors suggested a chemical explanation of the observed facts and led them to test the matter by an experimental study of the action of sodium citrate on milk.



- 3. The addition of sodium citrate to normal milk increases the amount of soluble calcium in the milk, this increase resulting from a reaction between the calcium caseinate of the milk and sodium citrate, by which is formed sodium caseinate (or calcium-sodium caseinate) and calcium citrate. The reaction is reversible.
- 4. The curdling of milk by rennin is delayed by the presence of sodium citrate; when there is added 0.400 gm. of the sodium citrate per 100 c.c. of milk (equal to 1.7 grains per ounce), no curdling takes place.
- 5. The curd produced by rennin in the presence of small amounts of sodium citrate (0.050 to 0.350 g.m. per 100 c.c. or 0.20 to 1.5 grains per ounce) increases in softness the consistency as the amount of sodium citrate in the milk increases.
- 6. The results of their work indicate that at the point at which rennin fails to curdle milk we have in place of the calcium caseinate or normal milk a double salt of calcium-sodium caseinate; this double salt, when rennin is added, is changed to a calcium-sodium paracaseinate, which, owing to the presence of the sodium, is not curdled.
- 7. The practice of adding sodium citrate to milk at the rate of 1 to 2 grains of citrate per ounce of milk appears to have a satisfactory chemical basis in the reaction between the sodium citrate and the calcium caseinate of the milk. The amount added is governed by the object in view, viz: Whether it is desired to prevent curdling or only modify the character of the curd in respect to softness.—

  Med. Brief.

TONSILLAR INFECTION:—Opposed to Henke's view that the tonsils are organs of elimination, and that disease of these organs is very rarely if ever caused by surface infection, is arrayed a long list of anatomical facts, established data, both bacteriological and pathological, and a vast amount of clinical observation. And this array has been substantiated by experimental research. In the first place,

as far as we know, there are no afferent lymph vessels running to the parenchyma of the tonsil and the tonsils do not possess perilymphatic spaces, such as we find in the lymph nodes. The peculiar anatomy of the epithelium of the tonsillar crypts offers mechanically a less perfect barrier against infection than does the surface epithelium. know from pathologic studies that in acute tonsillitis the attack is first directed against the epithelium of the crypts, and that the parenchyma is only involved when this barrier has been destroyed by the toxic action of the micro-organisms. There are a few micro-organisms that will pass from the surface inward through unaltered cryptal epithelium and gain access not only to the parenchyma of the tonsil itself but to its afferent lymphatics and regionary lymph nodes. Among such micro-organisms are found the tubercle bacillus in man and the anthrax in hogs. Clinically we know that a descending tuberculous cervical adenitis may originate from a latent lesion of the tonsil; that the removal of tonsils frequently clears up a systemic infection such as rheumatoid arthritis; and that endocarditis, nephritis, and other septic conditions follow after an acute attack of tonsillitis and are not present when the attack of tonsil-Experimental work by men who stand high litis begins. not only in this country but abroad gives conclusive evidence that inert foreign bodies under certain circumstances may pass from the crypts through the cryptal epithelium and gain access to the efferent lymph channels.—Geo. W. Wood. M.D.. of Philadelphia, in The Therapeutic Gazette.

THE SALICYLATES IN RHEUMATIC INFECTION:—R. Miller (Lancet) states that the theory that salicylates have the power of diminishing the activity of the rheumatic infecting agent may be taken as the working basis of salicylate therapy in rheumatism, and the drugs should be administered with the sole view of controlling the bacterial activity. Of this the temperature chart is as accurate an index in



rheumatic as in other infections (e. g., tuberculosis). Care must be taken to discriminate between symptoms directly due to active rheumatic inflammatory processes and those dependent upon toxic parenchymatous changes which may remain long after all bacterial activity is at an end. Used solely with a view to controlling bacterial activity, the effective range of dosage for child or adult is usually from 60 to 120 grains per diem. Less than 1 dram daily is rarely sufficient; more than 2 drams need seldom be given. Much larger doses than these have been shown to be safe if propperly administered, and if necessary to gain control may be used, but for the most part "massive" doses have been administered in cases of chorea in which there was no evidence of bacterial activity remaining. Any dose greater than 100 grains daily should be given subdivided into 10 doses in the twenty-four hours. Large infrequent doses should never be given, particularly in children. Constipation must be voided. The sodium salicylate should be combined with an equal dose of sodium bicarbonate. Vomiting in cases of severe cardiac dilatation may be difficult or impossible to prevent, but in other cases may be avoided for the most part. The more serious symptoms of salicylate poisoning (acid intoxication) should nowadays never be allowed to arise.—Medical Record.

THERAPEUTIC NOTES:—Don't inject mercury hypodermatically if there are renal lesions.

Five grains of chloral hydrate to the ounce of vaseline promotes the growth of hair after debilitating illness.

Salvarsan does not cure syphilis, but it does rapidly heal some of its lesions. In no case neglect the proper use of mercury.

In chronic pharyngitis with irritable cough, try this as a gargle: Sodium borate, 2 drachms; tincture myrrh, 1 drachm: infusion of coca leaves, 8 ounces.

Southern Clinic suggests this for uremic conyulsions: Pilocarpine hydrochlorid, 1 grain; tincture veratrum, 30 minims; syrup tolu, 4 drachms; anise-seed water, 1 drachm. Teaspoonful in water, repeated in two or three hours if necessary.

The European war has developed a new surgical dressing, sawdust. It is being used in the military hospitals at Edinburgh. Sawdust from soft woods is sifted through a number 8 sieve to remove coarse pieces, and then through a number 40 sieve to take out the dust. The portion that will pass through this sieve is packed in bags of muslin such as is used to wrap butter. The whole is sterilized. These bags are cheap and readily absorbent.

Endameba buccalis having been proven to cause pyorrhea alveolaris, or Rigg's disease, and as emetine has been proven to cure amebic dysentery, Smith and Barrett put six and six together and brought out a real cure for Rigg's disease. Emetine may be locally applied, but perhaps the surer way is to inject it hypodermatically into any part of the body, giving one-half grain of emetine hydrochlorid once a day for three or four days. If relapses or reinfections occur, repeat the treatment.—Medical Council.

THE TREATMENT AND PREVENTION OF PELLAGRA:—Although the cause of pellagra has not yet been definitely decided, the large majority of American observers hold to the old view that it is of dietary origin. Drs. Joseph Goldberger, U. S. Public Health Service, and surgeon in charge of Pellagra Investigations, C. H. Waring, assistant surgeon, and David G. Willets, technical assistant, in *Public Health Reports*, October 23, 1914, point out that the general tenor of their studies has led them to conclude: (1) That pellagra is not a communicable, an infectious, or a contagious disease, but that it is essentially of dietary origin; (2) That it is dependent on some yet undetermined fault in a diet in which the animal or leguminous protein component is disproportionately small and the non-leguminous vegetable

component disproportionately large; (3) That no pellagra develops in those who consume a mixed, well-balanced, and varied diet, such, for example, as that furnished by the government to the enlisted men of the Army, Navy, and Ma-Such being the deductions of these investigators, it follows that in treating pellagra the question of diet is the first consideration. Regarding pellagra, then, as a fault of nutrition, "mal de misere," or as chronic intoxication, the authors recommend that as long as clinical evidences of pellagra are manifest the patient should be given and urged to take an abundance of fresh milk, eggs, fresh lean meat, beans, and fresh and dried (not canned) peas. No medicine has any specific value. Thus the prevention and eradication of pellagra will depend essentially on the substitution of a mixed, well-balanced, varied diet for the restricted, one-sided diet that the individual will be found to have consumed prior to the development of symptoms.— N. Y. Med. Record.

THE SUBCUTANEOUS INJECTION OF OXYGEN AS A THERA-PEUTIC MEASURE:—The writer records having personally seen one life apparently saved by this procedure, he recommends it because of its simplicity and apparent harmlessness, especially as a last resort. The technique is as follows: The ordinary oxygen cylinder is used with the usual valve and wheel by which the escape of gas is regulated. To the tank is attached sufficient length of rubber tubing 1 cm. in diameter, to the end of which is attached a small hollow needle. The rate of flow is observed by letting the gas bubble through alcohol or sterile water. It should be just short of a continuous stream of bubbles. The selected portion of skin is sterilized by iodine. Any portion where the skin is lax will do. The needle is then introduced and the gas allowed to raise a lump half the size of a football. After withdrawing the needle the orifice is closed with adhesive. Most of the gas is absorbed in a few minutes, though some crepitation remains much longer.

McCrae considers the following conditions amenable to this treatment:

- 1. Accidents from anaesthesia.
- 2. Edema of the lungs, edema of the glottis, and accidental interference with respiration by disease of the upper part of the respiratory tract.
- 3. Marked dyspnea with defective oxygenation, as in cardinc and renal disease.
  - 4. Asphyxia of infants at birth.
  - 5. Syncope.
  - 6. Electrocution.

-John McCrea, M.D., in Am. Jour. Med. Science.

THE REQUISITES OF THE MODERN DOCTOR:—To achieve the greatest success in his practice, the modern doctor must be a man possessed of logical mind, medical skill and moral courage. He must not only be able to recognize the early signs and symptoms of diseased conditions, and to draw correct conclusions therefrom, but must also have the courage to tell his patients of his findings truthfully and fearlessly. . . . On the other hand, the doctor of today owes a duty to the state. . . . By reporting promptly all cases of communicable disease that come under his notice, the doctor lends a valuable service not only to the community but also to his individual family. A man who allows cases of diphtheria to go without treatment until they are moribund, who refuses or fails to recognize tuberculosis until the lungs are filled with rales and the sputum with tubercle bacilli, or who neglects cases of cancer until they are inoperable, or at least beyond recovery from operation, has no place in the modern practice of medicine. The people are demanding better things and they are entitled to more consideration; on the other hand, men who are prepared to practice modern medicine need have no fear that there is no demand for such service.—Guy L. Kiefer, Jour. Mich. State Med. Soc.

TYPHOID FEVER is interestingly discussed by Dr. Solomon Solis Cohen in the January issue of the *Critic and Guide*. In presenting his treatment Dr. Cohen gives special attention to the importance of having patients drink large quantities of water, and in doing so remarks:

"If the patient will drink a sufficient quantity of plain water to keep the daily output of urine up to 60 fluid ounces or thereabouts, that may suffice. An output of 70 to 100 fluid ounces, however, is preferable. As a rule, if the nurse is tactful and persistent, the patient will drink a quantity of water and of alkaline-saline beverage (or of some palatable, non-aperient mineral water) that, together with the liquid nutriment administered, will keep the kidneys sufficiently active. No answer annoys me more than that of the sick room attendant ("trained" nurse, "practical" nurse, or relative, matters not) who, when asked if the patient has been given sufficient water, replies, "All he asked for." He is not sufficiently alert—he hasn't the sense of need to make him "ask for" it. His perceptions are too much dulled by the toxemia. The water must be offered to him regularly. It must be forced on him, if need be-not violently thrust down his throat of course, but skillfully "forced," as a conjurer "forces" a card. And the quantity taken in a given time must be known accurately—not "about so much." but "so much, exactly."

MAYO RESEARCH FOUNDATION OF THE UNIVERSITY OF MINNESOTA:—A plan of Drs. William J. and Charles H. Mayo, of Rochester, Minn., to establish a \$1,000,000 foundation for medical research in connection with the University of Minnesota under certain restrictions has been approved by the faculty of the medical department and it now is under consideration by the University Medical College Advisory Board. The interest of the fund will be used in research work at Rochester by graduates of the university medical department.—Med. Record.

INSANITY INCREASES:—The Census Bureau, in a recent report, states that the number of insane reported in institutions increased from 150.151 in 1904 to 187.791 in 1910 -an increase of 25 per cent in six years. The total population in the same period increased only 12 per cent, thus showing the insane in institutions increased twice as fast as the population. In 1904, one person out of every 543 was confined to an institution for the insane; in 1910, one out of every 490. These increases, the report says, are at least partly attributable to the extension of the provisions made for the care of the insane. Of the 60.769 persons admitted to insane hospitals in 1910, 36,654 came from cities, villages or other incorporated places of more than 2,500 inhabitants, while 20,442 came from the smaller towns or country districts, leaving 3,673 for whom the place of residence was not reported. From rural communities forty-one insane persons were admitted per 100.-000 population; from the urban communities the ratio was eighty-six per 100.000.—Cin. Lancet Clinic.

IODINE TREATMENT OF DIPHTHERIA:—The local application of iodine has been successfully employed by Dr. A. H. Thomas (Brit. Med. Jour.) in the treatment of diphtheria and scarlet fever, the form used being an ointment containing 5 per cent of free iodine. This ointment is applied as follows: Three cotton-wool mops are used, two to remove the secretions and false membrane, and to dry the affected surface; the third, after smearing it with the ointment, is thoroughly rubbed over the inflamed tissue and surrounding areas. These applications are repeated every three hours or in severe cases, every two hours, until improvement occurs.

Under this treatment, Thomas says, many cases of diphtheria clear up within a few hours, the throat becoming quite free from false membrane on the second or third day. In the scarlet fever cases, there was remarkable freedom from local complications.—Critic and Guide.

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## Priginal Communications.

WAITING FOR THE DIAGNOSIS.

BY WILLIAM F. WAUGH, A. M., M. D., CHICAGO, ILL.

Many a time and oft we have read more or less erudite disquisitions on what to do while awaiting for the coming of the doctor. The measures by which the laity are encouraged to interfere and complicate the case inevitably bring to mind the line ending—"where angels fear to tread." But in these ultra-scientific times, when nothing but a diagnosis ciphered out mathematically, through the aid of bacteriology, and half the other 'ologies in the unabridged, will satisfy the demands, are we to let the patient die; or at the very least pass beyond the stage when therapeutic intervention may be useful, while we are waiting to tag the intruding monster correctly?

It is perfectly right that we should know exactly with what we are dealing, and we can never know too much about our case; but the patient is not exactly consumed with curiosity as to what hit him—he would like to be cured. And it is unfortunately true that by the time the

Widal has satisfied us that we have to deal with a typhoid invasion, all the practical result of our labors is to know what we might have done with benefit a week before. Without seeking in the least to discourage the practician in his pursuit of accurate knowledge, we may lay down a few suggestions as to a safe and useful treatment to fill in the time.

We are far from advocating a treatment of symptoms alone, of surface indications that may depend on quite different causes and demand similarly varying treatment. Homoeopathy has carried this system to the limits of the absurd. We remember—the Professor of Practice rushed into the sick room, his face pallid and drawn with fatigue, eyes bright with fever, but radiant with triumph, crying: "I have spent the night searching my books and have found the key—it is the pain in the left ankle! You are as good as cured." Within a week the patient died, of uterine cancer.

The Eclectics do better. They study the patient and recognize the disorder; that is, the departure from physiologic balance of the vital functions; and they apply the remedy that will correct the derangement and restore the balance. Quite justly they claim that a remedy that removes the symptoms may be assumed to cure the disease -else why should it remove the symptoms? The great value of this method is that it compels the doctor to study his patient closely, and to know his physiology. In that it is superior to the methods of the man who knows his test tubes and sections, and nothing else. There is no source of knowledge to the doctor worth nearly as much as the study of the patient. All we get from the world of general information is general; the case demands individual knowledge. We may know much of the bacteria, and their operations in general—the patient and the doctor are especially interested in the bacteria at work in this particular case, and the reactions of this particular individual with them.

Study your case deeply; be prepared to make and defend your diagnosis by every means known to the profession, so that your record may pass unquestioned before any society in the world: but meanwhile—

The first symptom needing attention is usually pain. It is so easy to shoot morphine in, that it is apt to become a habit to pull out the hypo before the patient is through with the tale of woe. A very bad habit, too. If the pain is due to strangulation, morphine is a peril—the obstruction must be relieved before death of the strangled tissues takes place. Only inflammatory pains are best eased by thebaics. Neural pangs subside better under atropine, or still better, hyoscine. Acute myalgias respond promptly to ammonium chloride in scruple doses every eight hours for two days. Many subacute pains fall before iodides. Rheumatic suffering is quelled by salicyl. Many potent derivatives stop gastric cramps quicker than opiates. Glonoin unlocks anginas; spasm relaxes under hyoscine; the agonies of severe gastric acidity give way to large doses of soda, or to brown iodide of lime; gallstones are best assuaged by morphine with hyoscine, followed by a few drops of chloroformquicker, better, and far safer, than morphine alone, which has caused many deaths. The triad combination of glonoin, hyoscyamine and strychnine relieves more different kinds of pain than any other single or compound analgesant known.

In the great majority of cases the first indication is to empty the stomach and bowels. The old practice of an emetic and a brisk cathartic had much to justify it. One illustration—an emetic brought up a lot of cantelope rind and decomposed bologna, that our laboratory friends might have been months in diagnosing (?); and solved the etiologic problem while it cured the baby.

Whether an emetic is indicated or not, catharsis always is; there is no known malady that is not bettered by removing from its symptom complex all that is due to fecal toxins in the blood. Subtract this, and France stands without Russian or English support. The method does not so much matter—each of us has our favorite. Mine is a centigram of calomel and half that much podophyllotoxin (Mr. Printer man, an ye love us, get in that extra otox), every half hour for seven doses, followed by a saline in full dose. Quite often a copious colonic flushing is also needed. Flushing the sewers and eliminating toxins is like kissing a pretty girl—one can't overdo it. Ages before we even suspected that toxemia was the chief peril in many maladies, we knew the favorable influence exerted over the course of disease by purgation.

In just one affection is purgation formally contraindicated—Asiatic cholera. Here the slightest attempt at acting on the bowels is fatal, even by that innocent friend of infancy, castor oil. This is one of the very few points in practical therapeutics that has been permanently settled.

(To this should be added peritoncal infection, whether from the appendix or other sources.—Ed. S. P.)

The elimination by the kidneys must also be scrutinized and maintained at full rate. Especially the elimination of solids is essential to the continuation of life. Discrimination is needed in the selection of diuretics. Juniper is dangerous, as an overdose may stop renal secretion completely. The digitalis tonic principles are only diuretic when the capillary circulation is relaxed, as in anasarca. arterioles are spasmodic and only a dribble of blood permitted to pass the renal artery, a dose of digitalis may pinch this off and fatal anuria result. Gelseminine, digitonin, best of all veratrine, by relaxing vascular tension permit fuller blood-supply and excretion. I think—clinically—the potash salts relax the renal capillaries and facilitate the excretion, at least of water, washing out some of the solids as well. Sparteine and caffeine seem to act by lessening the peripheral tension relatively to the force of the ventricle, so that the heart forces more blood through the renal

capillary system. They certainly do not directly raise the force of the heart as digitalin does; yet they are truly diuretic.

The study of the pulse is as valuable as it was before the invention of modern instruments of precision. The rate, force, rhythm, of the cardiac pulsations, furnish invaluable data for our therapeutics. The forerunners of heart weakness may be detected in time to prevent failure. The sedatives, tonics, relaxants, contractors, stimulants, regulators of the circulation indicated by the pulse, are indicated by the malady causing the deviations from normal heart action. Whatever may cause a heart beat of 140 per minute it is bettered by reducing the beats to 100 or less. Even though the pulsations seem quite forcible, a tendency to irregular wobbling foretells the coming exhaustion, and cries for a precautionary administration of digitalin.

So also one need not wait for a disease name to treat a temperature above 106 Fhr. Or one of 96. We cool down the fever promptly, just as we would drag a drowning man out of the water and later ascertain how he came to be in it.

Relax tension; quiet apprehension; quell fever; regulate the heart; enforce quiet, prescribe the requisite food and drink; use hot and cold water-bags as may be indicated; and treat whatever symptoms seem to be most prominent, perilous or distressing.

I have not mentioned hypnotics, because they are the most abused remedies in our abused materia medica. Scarcely a solitary indication for sleep-producers can be cited, if the obstacles that prevent sleep are removed—and none but a bungler would administer these medicaments without first doing this. Take the precautions suggested in using the chemic hypnotics—relieve pain, secure quiet, balance the circulation, allay apprehension and other mental disquiet, and then give—ah; but if you have done all this, why give anything? You cannot by any known means prevent sleep if you have removed the obstacles.

Add to the above the local measures demanded by local conditions, and we have a clearly indicated plan of treatment, that may be instituted immediately and carried out in any case that does not show the need of specific treatment by a diagnosis self-evident from the start. Whatever the nature of the malady, as shown by subsequent investigation, and the history of the case as it unfolds, we are accomplishing by the above method all the good that treatment can afford, without running any risk of doing harm. We are saving invaluable time and getting in our work in that early stage when the malady is not as yet fixed, when material lesions have not been inflicted. It is the bucket of water at the start of the fire, instead of waiting until the conflagration is well under way, or even until the building is destroyed and the only thing left is reconstruction. And in too many instances the latter is all that the policy of watchful waiting, or, speaking in parlance medical, of expectancy, leaves us.

## Abstracts.

### AN ADDITIONAL IMPORTANT TOXIN TEST IN DIPH-THERIA:—"THE SCHICK METHOD.

BY THE EDITOR.

The great value of the demonstration by Klebs and Loeffler in the latter third of the last century (1883-4) of the definite etioloical factor in diphtheria; so greatly enhanced by the now accepted results both as to prophylaxis and treatment, by the timely administration of antitoxin, has been further increased by the idea conceived by B. Schick, of Vienna, in 1909, worked out by him in the last two or three years, and corroborated by Drs. W. H. Park and Abraham Zinghen, of New York, that "individuals who reacted to the toxin were suspectible to diphtheria and those giving negative results were immune. Consequently "thefinding of the Klebs-Loeffler baccillus," as stated axiomatically by French, "is the only means of making an absolutely positive diagnosis," should be amended by adding, "when verified by the Schick test."

We have learned that some individuals, notably the newly born, some adults, aged persons and even children possess an immunity; and furthermore, that some "carriers" do not develop the disease, notwithstanding staining, the microscope, and the more definite cultural methods may have demonstrated the presence of the specific bacilli in their persons; therefore, although the beneficient results, so universally accepted, of the use of antitoxin, in some cases may not be necessary, by a measure as easily and readily practiced, and as simple as the Von Pirquet test for tuberculosis, and as harmless, can be hailed with great unanimity of pleasure and satisfaction.

In the Journal of the American Medical Association, Vol. LXIV. No. 15, April 10, 1915, pp. 1203-1208, are three short but important articles, respectively by (1) H. N. Bundesen, M. D., Medical Inspector, Department of Health, Chicago, Ill., on "The Schick Reaction with a Report of Eight Hundred Tests; (2) Charles Graef, M. D., and George Ginsberg, M. D., of New York, on "Some Observations of the Schick Test; and (3) Ellsworth E. Moody, M. D., of St. Louis, on "The Intradermic Diphtheria Toxin Test," to which we especially desire to call the attention of our readers; and for the benefit of those who may not have access thereto, we submit the following somewhat cursory abstract.

Schick and Park claim that "the blood serum of about 80 per cent of the new-born, from 50 to 60 per cent of children and 90 per cent of adults contains sufficient diphtheria antitoxin to make them insusceptible to diphtheria, and hence makes it unnecessary for them to receive a prophylactic injection of diphtheria antitoxin." "Experience," says Schick, "bears this out."

As to the method and technic, we quote the following from Dr. Bundesen:

"For the carrying out of the Schick tests it is essential to have an accurate 1 c.c. all glass hypodermic syringe, having a scale divided into ten parts, and a short, sharp, fine platinum iridium needle, sufficiently fine to be introduced between the layers of the skin. To introduce the needle, have the opening or beveled aspect of the point looking upward and hold the head of the syringe lower than the point when introducing the needle into the skin.

"TECHNIC—The skin of the flexor surface of the forearm (upper one-third) is prepared by cleaning with tincture of green soap and 95 per cent alcohol. With the thumb and first finger of the left hand pinch up a small portion of the skin and carefully insert the needle into, but not through the skin so the opening in the point of the needle is covered and so the needle can be seen beneath the superficial layer.

"A dilution of a fresh standard diphtheria toxin is made of such a strength that 0.1 c.c. contains 1-50 of the minimum lethal dose for a 250-gm. guinea pig, and this is injected, pressure being exerted in an upward direction. If the injection has been properly given, there is to be seen at once a white bleb-like elevation which persists for several minutes and is distinctly studded with little pits correspond to the opening of the hair follicles.

"The results are available at the end of twenty-rour hours. If antitoxin is absent or present only in very small amounts—insufficient for protection—a positive reaction appears, which is characterized by a constantly increasing circumscribed area of redness (halo) and induration of from 10 to 25 mm. in diameter that reaches its maximum in forty-eight hours. It persists for about a week, and on fading shows a brownish pigmentation with superficial scaling and a characteristic central infiltration.

Positive reactions indicate that there is less than 1-30

unit of antitoxin in 1c.c. of blood serum. Such persons are susceptible to diphtheria. Though intensity of the reaction varies in different individuals, a well-marked redness indicates a complete or almost complete absence of diphtheria antitoxin. Faint reactions point to the presence of small amounts of antitoxin."

Dr. Bundesen's "conclusions" are as follows:

"By means of the Schick test we are in a position to tell definitely who is suspectible to diphtheria, and when an epidemic breaks out can inject those and those only.

"By it the danger of cross-infection is greatly decreased. Children with diphtheria that have had scarlet fever are therefore immune from scarlet fever and can be placed in scarlet fever wards when the inmates yield negative Schick, etc.

"It permits a great reduction in antitoxin bills. Much needless pain and annoyance of patients is avoided, and the possibility of anaphylactic shock is greatly minimized."

From Drs. Graef and Ginsberg we quote:

"A feature of especial interest and value which stands out among these is the fact, now well established, that certain persons have a natural immunity to diphtheria and will not take it, however much exposed. Many of these, indeed, become carriers of the Klebs-Loeffler bacilli, and infect others, although themselves safe from the disease.

"Finding the diphtheria organism in the throats of such persons is of uncertain diagnostic value unless supplemented by a test to show whether immunity is present or absent. In such cases sore throats due to other organisms may easily be confounded with diphtheria, the diagnosis being established by the laboratory finding the Klebs-Loef-fler organisms.

"These are among the cases which puzzle and worry the doctor. He finds, for instance, a case of slight tonsillitis (clinically), sends a swab for examination, ordering a mild gargle and perhaps an iron mixture meantime; back from

the laboratory comes the report, 'Diphtheria positive,' and he hurries back to his patient with antitoxin only to find that in the brief interval everything has cleared up and the patient appears normal. The next patient showing a similar picture he decides to treat in the same way, but in place of clearing up it progresses to a virulent case of diphtheria in which he now finds himself disappointed in the use of antitoxin, late injections of this being of comparatively less value.

"From such experiences he argues that either the laboratory is of little use to him, or antitoxin is an overrated remedy; or still more likely, concludes that thereafter whenever there is the possibility of diphtheria being present he will do best to inject promptly the antitoxin and not wait for any laboratory report. He feels that the injection will do no harm, and if it turns out to be diphtheria he has gained so much in time and effect. In the last he is certainly right, and yet every medical man would perfer to avoid the use of this remedy in any case in which he might safely do so.

"The Schick test for immunity offers a promising aid in this matter. If by a simple injection into the skin we can determine who is, and who is not, liable to infection, a long step is taken toward simplifying the handling of these situations.

- "1. The use of immunizing doses of antitoxin will not be necessary if persons exposed to infection are found to be naturally immune.
- "2. Even when bacilli are found in the throats of such persons, no injection of antitoxin need be given when they suffer from tonsillar or other pharyngeal infections.
- "3. Nurses in institutions, when proved immune, can safely care for diphtheria patients while susceptible nurses are kept away and employed on other cases.
- "4. Much aid can be had in solving the puzzle of why one patient recovers without antitoxin while the next, ap-

parently an exact counterpart, dies in spite of the use of this valuable remedy.

"Park has given an interesting and very complete description of the Schick test, its technic, etc., and for the benefit of the reader who has not access to such information part of the matter is included here.

"It has been shown that only persons who have either no antitoxin or but a minute amount in their blood and tissue are liable to contract diphtheria. With this fact before us we have but to estimate the amount of antitoxin present in any individual to know whether he will be safe from infection or liable to it if exposed.

"Methods of doing this previously proposed have been too troublesome for practical use, but Schick's test is at once simple and safe, and seems to be reliable.

"It is not more difficult to make than the Pirquet test made with turberculin for tuberculosis, and consists of the intracutaneous injection of a prepared solution containing minute quantities of diphtheria toxin. This will produce a positive reaction in twenty-four hours if antitoxin is absent, or present in amount insufficient for protection.

"The reaction consists of redness and slight swelling over the injected area. It continues for a week or more and leaves a brownish pigmentation with superficial scaling for a time after this.

"In a small percentage of older children and adults there is a pseudoreaction even when large amounts of antitoxin are present, and these must be carefully distinguished from the true reactions.

"The pseudoreaction can be recognized by its earlier appearance, its less sharply circumscribed form, greater infiltration, and the fact that it disappears in twenty-four hours or two days at the latest. The spot is less pigmented later, and superficial scaling is not noted. The directions for making the test are as follows:

"An accurate syringe with a sharp but short-pointed,

fine needle is necessary. The usual 1 c.c. record tuberculin syringe with a fine platinum iridium needle serves well.

"A standard diphtheria toxin is diluted at first 1:10, in 0.5 per cent phenol (carbolic acid); this dilution will keep in ice box for at least two weeks. Park advises care in securing a pure quality of toxin. The diphtheria toxins provided for this purpose by commercial houses have not proved reliable. For use further dilutions can be made in normal saline, of such strength that a 0.1 c.c., or as stated above, 0.2 c.c., contains 1-50 minimum lethal dose for the guinea pig. This amount is injected intracutaneously on the flexor surface of the arm or forearm.

"The intensity of reaction varies in different individuals, but a well marked redness indicates an almost complete absence of antitoxin. Faint reactions point to the presence of a very small amount of antitoxin, not sufficient to protect against diphtheria. To prevent the appearance of the reaction, according to Schick, at least 1—30 unit of antitoxin per cubic centimeter of blood is required. This amount he considers sufficient to protect against diphtheria. Accord to Von Behring, even as little as 1—60 unit of antitoxin will protect against the disease in uncomplicated cases."

After a brief report of a number of cases made in Lincoln Hospital, New York, begun because of a troublesome outbreak of diphtheria among the nurses in December, 1914, which continued to crop out at intervals through the following January, confirmatory of the findings of Schick and Park, they submit the following "conclusions":

- "1. The most susceptible age is between 1 and 5 years.
- "2. Immunity obtained by having the disease or by the use of immunizing doses of antitoxin lasts from a month to several years, varying greatly in different individuals and being very brief in children.
- "3. The Schick test is a helpful agent in testing the efficiency of immunization by antitoxin as well as the natural immunity existing in many persons.

- "4. It has helped to place on more certain grounds the assurance that bad cases of diphtheria should receive early and large doses of antitoxin by intravenous injections. Antitoxin is ten times as effective when so used, as compared with the ordinary method of administration.
- "5. Park has obtained results in families showing a striking similarity in reactions to the test. If the youngest child of a family has a negative reaction, all the older children are likely to be negative, and if the older children are positive, the younger ones are also. When variations are found, the younger children show the positive reaction."

Dr. Moody, of St. Louis, in his article gives the results of the Schick test in 524 cases, and stating that "We have not seen a case of true clinical diphtheria in negatively reacting individuals," concludes with the following statements:

"The test is of definite clinical value in differentiating between persons who are susceptible to diphtheria and those who are not susceptible, and is therefore useful in determining which cases, of those to be placed in an environment where the liability to exposure is great, should be immunized.

"It is of value in differentiating between clinically doubtful cases of diphtheria, positive reactions being obtained in clinical cases, negative reactions in carriers.

"It is useful in experimental work in determining the effects of various forms of immunization and the duration of immunity conferred by these methods.

"It has a definite value in the handling of diphtheria epidemics in institutions.

"I am indebted to Parke, Davis & Co. for diphtheria toxin to perform these tests."

NEURILLA, so well known for its use in nervous diseases, contains no opium, coca leaves or alkaloids that bring it under the provisions of the Harrison Anti-Narcotic Law, and may be prescribed or dispensed as in the past.

### **E**ditorial.

#### A PRIZE WORTH TRYING FOR.

The American Social Hygiene Association has been offered a prize of \$1,000 by the Metropolitan Life Insurance Company to be awarded to the author of the best original pamphlet on social hygiene for adolescents between the ages of twelve and sixteen years, approved by a committee of judges to be selected by the association.

Competition for this prize is open to all.

The Metropolitan Life Insurance Company desires to use the winning pamphlet among its industrial policyholders.

The Committee of Judges will conduct the competition in accordance with the following conditions:

Contest closes July 31, 1915, at midnight; any manuscript received later will not be considered.

Manuscripts should not exceed 3,500 words and must be in English and must not have been previously published.

Manuscripts must be typewritten on one side only of plain white paper 8x10½ inches.

Manuscripts must be paragraphed and punctuated for submission as "copy" to printer.

Each manuscript must bear some identifying mark or pen-name, but not the name of the author.

The author's name and address, and the identifying mark or penname should be in a sealed envelope, accompanying the manuscript; the face of the envelope should bear the mark of pen-name only.

More than one manuscript may be submitted by the same author.

The winning manuscript, in consideration of the award of \$1,000, becomes the property of the donor of the prize, all rights therein being surrendered by the author.

The right to purchase any manuscript submitted, at the rate of 5c a word, is reserved by the Metropolitan Life Insurance Company and by the American Social Hygiene Association.

Any manuscript not winning the prize or purchased will be returned to the author if return postage is provided.

In offering a prize of one thousand dollars for a social hygiene pamphlet for adolescents, suggested and generously provided by the Metropolitan Life Insurance Company, the American Social Hygiene Association is presenting a problem for solution by writers in the social hygiene field. It is, perhaps, unnecessary to say that accuracy of statement, such use of statistics and quotations as is warranted

by the context from which they are taken, broad and practical grasp of the subject as presented, soundness of pedagogical method, and attractive and convincing form are among the important points to be considered in judging the merits of manuscripts submitted.

The questions most frequently asked by those interested in the competition are: "What kind of pamphlet is wanted? Is it to be written for boys, or for girls, or for both-or for parents? Must it cover the entire period of the four years specified? Must it take up the physiological changes of adolescence? What sort of instruction may the author assume that the child has had before reading the pamphlet?" To such inquiries the reply is that the prize has been offered for the best solution of the problem of approaching through the printed word the youth of America from twelve to sixteen years of age. If the author is convinced that the indirect approach through the parent is the proper method, he may prepare his manuscript for use by the parent. If he thinks that the most pressing need is for a pamphlet to be placed in the hands of boys, he may prepare his manuscript for that purpose. Similarly, he may prepare it for the use of girls, or, if he thinks it more desirable, he may combine his information into a single pamphlet for the use of both boys and girls. If he believes that adolescents from twelve to sixteen years of age do not form a practical group, he may direct his effort toward any portion of this age group (for example, those from twelve to fourteen years, or those from fourteen to sixteen years), and may so indicate. He may submit his manuscript as one of a series designed for special groups, but should present also the other numbers of the series to show its character as a whole. Notes explaining the points of view from which it has been prepared may be submitted with the manuscript, bearing the same identifying mark or pen-name, but not the name of the author.

It is generally recognized that the early adolescent period in the life of both boys and girls presents one of the most difficult problems in educational work. In the special fields of instruction or education with which the social hygiene movement deals, this period is probably the most difficult. There is substantial agreement as to what information ought to be given the young child and as to the desirability of thorough, scientific instruction touching on the problems of sex and reproduction for persons of mature years. But the problem of the early adolescent period still awaits a satisfactory solution.

Address manuscripts and requests for further information to the American Social Hygiene Association, 105 West Fortieth Street, New York City.

#### TENNESSEE STATE MEDICAL ASSOCIATION.

The eighty-second annual meeting held in this city, April 13, 14, 15, ult., was one of the most successful and satisfactory in all its history. The attendance, amounting to about 400, was largely representative of the ablest and most progressive members of the profession in the State. While not all of the papers on the very extensive program were read, those that were presented were of an unusually attractive and practical character; and the discussions brief, pointed, pithy and elucidative were the best coming under our personal observation during the past forty years. Time and space will not permit our giving even the titles of the papers read, but we can confidently anticipate with pleasure, and commend to our readers the ensuing issues during the coming months of the State Association Journal that will contain both the papers read and the discussions thereon. We congratulate the Committee of Arrangements and the Committee on Scientific Work on their very efficient efforts.

The "Special Addresses" of Dr. Frank Billings, of Chicago, on "Acute and Chronic Rheumatism;" Dr. E. C. Rosenow, of Chicago, on "The Etiology and Experimental Production of Appendicitis, Ulcer of the Stomach and Cholecystitis;" and Dr. J. M. T. Finney, of Baltimore, on "The Diagnosis and Choice of Operation in Certain Affections of the Stomach and Duodenum," were "gems of the first water," and we can and do congratulate our friends and associates who were so fortunate as to be present at their delivery.

The social feature, a "Smoker," tendered by the Nashville Academy of Medicine on Wednesday evening at the Tulane Hotel, was evidently enjoyable from the manifestations of the large number present.

The officers elected for the ensuing year were: Dr. E. C. Ellet, of Memphis, President; Dr. J. G. Price, of Dyersburg, Vice-President for West Tennessee; Dr. R. E. Lee Smith, of Doyle, Vice-President for Middle Tennessee; Dr. J. W. Johnson, of Chattanooga, Vice-President for East Tennessee; Dr. Olin West, of Nashville was reelected Secretary and Dr. C. N. Cowden, of Nashville, was re-elected Treasurer and named as Trustee for two years of the association's Journal.

Dr. Jere Cook, of Jackson, was elected as a delegate to the next meeting of the American Medical Association, with Dr. J. Mc. Hogshead, of Chattanooga, as alternate. The following were chosen as counsellors for two years: Dr. S. M. Miller of Knoxville, Dr. Scott Farmer of Cookeville, Dr. J. F. Gallagher of Nashville, Dr. A. B. Dancey of Jackson and Dr. J. L. Andrews of Memphis.

The association created the new department of ophthalmology, of which Dr. G. C. Savage was chosen President; Dr. N. C. Steel, of

Chattanooga, Vice-President, and Dr. O. Dulaney of Dyersburg, Secretary.

The next meeting will be held in Knoxville on the first Tuesday in April, 1916.

# HOUSE BILL NO. 726—A STATE BOARD OF PRELIMINARY EXAMINATION.

A bill to be entitled: "An Act to provide for the preliminary examination of all persons who may hereafter desire to practice medicine, surgery, osteopathy, or any other form of the healing art, in the State of Tennessee; to create a State Board of preliminary examination, and to define its powers and duties; to provide compensation for the members thereof; and to prescribe penalties for all violations of this Act."

Section 1.—Be it enacted by the General Assembly of the State of Tennessee, That immediately upon the passage of this Act, the Governor shall appoint three educators of recognized standing, one from each of the three grand divisions of the State, who shall constitute the State Board of Preliminary Examination, the members of which shall hold office for two, four and six years respectively, and until their successors are appointed and qualified. The term of each member shall be stated on the face of the certificate of his appointment, and all vacancies that may occur in said board, by death, resignation or otherwise shall be filled by the Governor.

Within thirty (30) days after the first members of said board shall have been appointed, the board shall organize by electing one of its members as Chairman and another as Secretary-Treasurer, and it shall adopt and use a seal which shall be affixed to all certificates which may be issued by the board as provided by this Act.

The board shall have the power to make and enforce all rules and regulations proper and necessary for its conduct, not in conflict with the terms and provisions of this Act, and it shall hold meetings at such times and places as to it may deem proper: Provided, however, that said board shall meet at least once a year in Nashville at a suitable place after the commencement exercises of the various schools of the State of Tennessee, for the purpose of conducting an examination of all persons who may desire to practice medicine, surgery, and osteopathy, or any other form of the healing art in Tennessee.

A fee of five (\$5.00) dollars shall be paid by every applicant taking the preliminary examination, as in this Act provided, and the expenses of the State Board of Preliminary Examination, as well as the compensation of its members, shall be paid out of the sums so paid by such applicants. The compensation of each member of the Board shall be fixed by its resolution or by-law. The provisions of this Act

shall not be construed or held to apply to any person who was practicing at the time of the passage of this Act, or who had practiced at any time during the year just preceding the passage of this Act, medicine, surgery, osteopathy, or any other form of the healing art in the State of Tennessee.

Provided further, that this Act shall not apply to Christian Science or to Christian Science practitioners."

Section 2.—Be it further enacted, That before any persons shall hereafter practice medicine, surgery, osteopathy, or any other form of the healing art, in the State of Tennessee, or shall treat for compensation by any means whatsoever any disease of the body or mind, or any ailment, injury or malformation of the human body, he or she shall first present himself or herself to the State Board of Preliminary Examination, or shall transmit to said Board his or her general credentials; provided, however, that any person shall be entitled, prior to entering a medical school, or during his or her attendance therein, to register with the State Board of Preliminary Examinations the high school diploma or its equivalent as is by this Act provided, and shall satisfy such board that he or she is a person of good moral character, has received a diploma or its equivalent from some reputable and recognized high school, and that he or she has received a diploma from some reputable and recognized school of medicine, surgery, osteopathy, or other school teaching any form of the healing art, in which is given a course of at least thirty-two (32) months, extending over a period of four years, and which course shall embrace the study of Anatomy, Physiology, Pathology, Surgery, Gynecology, Obstectrics, Chemistry, Bacteriology, Symptomatology, Diagnosis, Hygiene and Sanitation; provided, however, that after the year 1919 all applicants of the regular school of medicine shall have a diploma from a medical school whose curriculum is as high as that of the Medical Department of the University of Tennessee as published at present in its catalogue: Provided, further, that the provisions of this Act requiring a preliminary examination shall not extend to or embrace any persons who desire to practice medicine, surgery, osteopathy, or any other form of the healing art in Tennessee, who are graduates of reputable professional schools and who have had at least five (5) years' professional experience in other States of the United States.

The State Board of Preliminary Examination, if satisfied that the applicants possess the qualifications as prescribed by this Act, shall issue to such applicants a certificate, signed by the Chariman and countersigned by the Secretary of the Board and under the official seal of the board, which certificate shall state that the person to whom it is issued is qualified to stand the professional examination that is now, or may be hereafter, required by law before the State

Board of Medical Examiners, or the State Osteopathic Examining Board, and nothing in this Act contained shall be construed as abolishing or interfering with the professional examination that is now, or may be hereafter, required by law, as it is the intention of this Act only to test and certify the qualifications of applicants before they can legally take the professional examination required by law. Provided, however, if for any reason the State Board of Preliminary Examination is not satisfied that any applicant posseses the qualifications required by this Act, it may cause such applicant to be examined as to his or her general educational qualifications by a committee to be appointed by the State Board of Preliminary Examination, and this examination may be held, even though such applicant possesses the diploma or equivalent thereof, as is by this Act provided.

Section 3—Be it further enacted, that no professional examination shall be given by the State Board of Medical Examiners or by the State Osteopathic Board, or by any other medical or surgical examining board, unless the applicant shall have first presented to such board the certificate of the State Board of Preliminary Examination as prescribed by section 2 of this Act, and any applicant who shall undertake to stand such examination before the above named boards without having this certificate so issued to him or her prior to such examination shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not less than fifty dollars, nor more than five hundred dollars for such offense, and the license of the above named boards for professional examination shall be null and void if issued to any person who has not before taken such examinations, submitted himself or herself to the State Board of Preliminary Examination and received the certificate of such board as is by this Act provided.

Section 4—Be it further enacted, That any person who desires hereafter to practice medicine, surgery, osteopathy, or any other form of the healing art in Tennessee, and who shall attempt to obtain the required certificate of the State Board of Preliminary Examination by fraud, artifice or any other unlawful or improper practice, shall not be given a certificate by such board until the lapse of five (5) years from the date of such attempted unlawul and improper practice.

Section 5—Be it further enacted, That all laws or parts of laws in conflict with the provisions of this Act be, and the same are, hereby repealed.

Section 6—Be it further enacted, That this Act take effect from and after its passage, the public welfare requiring it. Passed March 30, 1915.

(Signed) WM. P. COOPER, Speaker of the House of Representatives. ALBERT E. HILL, Speaker of the Senate. Tom C. RYE, Governor.

Approved April 1, 1915.

#### THE SEVENTH PAN-AMERICAN CONGRESS.

This organization will meet in San Francisco June 17-21, inclusive. It assembles pursuant to invitation of the President of the United States issued in accordance with an act of Congress approved March 3, 1915.

The countries and colonies embraced in the Congress are the Argentine Republic, Bolivia, Brazil, Canada, Colombia, Cuba, Chile, Costa Rica, El Salvador, Ecuador, Guatemala, Honduras, Haiti, Hawaii, Mexico, Martinique, Nicaragua, Panama, Paraguay, Peru, Santo Domingo, United States, Uruguay, Venezuela, British Guiana, Dutch Guiana, French Guiana, Jamaica, Barbadoes, St. Thomas and St. Vincent. The organization of the Congress is perfected in these countries and the majority of them have signified their intention to be represented by duly accredited delegates.

The Congress will meet in seven sections, viz.: (1) Medicine; (2) Surgery; (3) Obstetrics and Gynecology; (4) Anatomy, Physiology, Pathology and Bacteriology; (5) Tropical Medicine and General Sanitation; (6) Laryngology, Rhinology and Otology; (7) Medical Literature.

All members of the organized medical profession of the constituent countries are eligible and are invited to become members. The membership fee is \$5 and entitles the holder to a complete set of the transactions. Advance registrations are solicited and should be sent with membership fee to the Treasurer, Dr. Henry P. Newman, Timken Building, San Diego, Cal.

The general railroad rate of one fare for the round trip, good for three months, made on account of the Panama-Pacific Exposition at San Francisco and the California Exposition at San Diego, is available for the Pan-American Medical Congress.

The Palace Hotel will be headquarters.

The First Pan-American Medical Congress was most successfully held in the United States in 1893. Five intervening Congresses have been held in Latin American countries. It now devolves upon the medical profession of the United States to make this, the seventh, the most successful in the series.

Charles A. L. Reed, President, Union Central Building, Cincinnati; Harry M. Sherman, Chairman Committee on Arrangements, 350 Post Street, San Francisco; Ramon Guiteras, Secretary-General, 80 Madison Avenue, New York City; Philip Mills Jones, Special Committee on Hotels, 135 Stockton Street, San Francisco.



Some Plain Facts About a Soporific:—For nearly forty years we have been making for the medical profession what we believe to be the ideal sedative, soporific agent, and the fact that its use at the hands of physicians steadily grows seems to be the best proof of its therapeutic value.

Until within late years we put this product on the market under the name of Daniel's Concentrated Tincture of Pasiflora Incarnata, but pirates began counterfeiting and forced us to protect the reputation our product had earned, and accordingly we gave it the distinctive name, Pasadyne.

We grow our own plants on a large acreage and and have done so all these years. In the manufacture of our product we draw upon every pharmaceutical advance, for we want to maintain the highest possible standard for *Pasadyne* (Daniel).

Hundreds of able clinicians have proven to their own satisfaction that Pasadyne (Daniel) is equal in therapeutic power to the older somnifacients, and is free from their disadvantages. Whenever you need a sedative or a soporofic, you may prescribe Pasadyne (Daniel) with the fullest assurance that it will produce the results that you want. It will not fail you.

A sample bottle may be obtained by addressing the Laboratory of John B. Daniel, 34 Wall Street, Atlanta, Ga.

TREATMENT OF PERSISTENT INACCESSIBLE HEMORRHAGE:—Every physician feels the need occasionally of a reliable agent in persistent hemorrhage that is inaccessible to the ordinary modes of treatment. Coagulose meets that want—meets it better, it is believed, than any agent hitherto employed for the control of hemorrhage due to defective coagulation of the blood. Coagulose is prepared in the biological laboratories of Parke, Davis & Co., from normal horse serum. It is administered hypodermatically (subcutaneously).

The directions for preparing Coagulose for use are as follows: Add to the powder in the bulb 6 to 8 c.c. of sterile water, the temperature of which should not be above 98 degrees F. Introduce the water into the bulb through the needle of a 5-c.c. syringe. The rubber stopper should then be replaced and the bulb immediately shaken, continuing the agitation three or four minutes or until the powder is completely dissolved.

To fill the syringe, invert the bulb and remove the rubber stopper from its mouth. Insert the needle of the syringe into the solution in the inverted bulb and draw the fluid into the syringe. By inverting the bulb before inserting the needle, one avoids the likelihood of drawing the foam or bubbles (caused by agitating the liquid in the bulb) into the syringe, as the foam will rise to the top of the solution, leaving the field for the insertion of the needle perfectly clear.

CONVALESCENCE:—The secret of prompt recovery from many a serious illness will be found in the prompt institution of tonic treatment. The resulting uplift is often all that is needed to enable the body to re-establish a nutritional balance and develop adequate resistance.

Thus, after the acute diseases, such as typhoid fever, pneumonia, pleurisy, influenza, or those requiring surgical operations like appendicitis, intestinal ailments, utero-ovarian ailments, and so on, the return to health often hinges on the thought and care given to restorative treatment. If a reconstructive like Gray's Glycerine Tonic Comp. is used, the result is rarely if ever in doubt. Unlike many remedies used to promote convalescence, Gray's does not whip up weakened forces. On the contrary, it aids and reinforces them by increasing the power and capacity of physiologic processes throughout the body. Thus the appetite is improved, digestive and absorptive functions are activated and the resulting improvement in cellular nutrition insures a notable gain in vitality and strength. Weakness and debility vanish as vitality and strength appear. This tells why "Gray's" is so useful and effective after the acute diseases.

CITY VIEW SANITARIUM:—A recent visit to this institution justifies the following statement as to its management:

The new building has greatly increased their capacity, but what is much more important, has greatly improved the manner in which they can care for patients. In the erection of this new building and subsequently in the working over and rearranging the older buildings, special attention was given to the idea of classification of patients, and they are now able to so classify and group them as to in large measure overcome all objectionable features incident to housing a number of sick people together, and especially of the class they treat. While still unable to isolate the individual patient absolutely and at all times from every other patient in the hospital, what they have done is to effect an arrangement whereby those types of cases, objectionable one to the other, are quite separated and not brought in contact with each other. With two new buildings, one for each sex, the one erected in 1907 and the other just completed at the beginning of this year, they have a thoroughly modern and

fully equipped hospital for the treatment of mental and nervous diseases and the addictions.

BEST AUTOMOBILE TIRES FOR HARD USES-Some automobile tires give very fine service when given but ordinary use, but when subjected to service over rough and rugged roads, worse than the ordinary, or over hard, flinty streets they very often go to pieces. The best tires for most severe service are Double Service Tires which are the product of the Double Service Tire and Rubber Co., of Akron, Ohio. These tires are made with a double thickness of tread which imparts on an average of twelve piles of fabric and one inch of service rub-This is like putting an extra sole on a shoe. The results in service being the same in comparison. This tread is so thick that punctures are practically impossible, yet the tires contain the same air space, and the same pressure, as is used in any other makes, so their resiliency and riding qualities are the same. Owing to the excellent method of manufacturing and selling adopted by the Double Service Company these tires sell for less than standard regular made goods, yet are guaranteed 7,000 miles service.

PANOPEPTON contains all the soluble and digestible substance of beef and wheat, protein and carbohydrate, the entire complex of organic and inorganic constituents, which include the catalytic agents, all absolutely esential. The conversion of the basic foods, beef and wheat, by means of actual gastric and pancreatic juices, is designedly carried to the point where the protein and carbohydrate substances are rendered perfectly soluble and diffusible, and the greater part of the proteins in the form of actual cell-building material, amino-acids.

The nourishing and sustaining properties of Panopepton, so long manifested in the feeding of the sick; its really dynamic restorative value in times of stress, so often the subject of clinical observation, now find explanation and confirmation in the advances of modern physiological chemistry. All that there is in beef and wheat has always been in Panopepton, and in a form which spares and economizes energy—a food for the sick.

THE SELECTION OF AN ALTERATIVE:—The value of the class of remedies usually described as alteratives is unquestioned, and the main point involved is the selection of one. The facts to be taken under consideration in disposing of this point are degree of therapeutic effectiveness and palatability. The qualities of the ideal alterative are combined in *Iodia* (Battle) in large measure, for which reason it has acquired a favorable reputation in late syphilis, rheumatism and other states indicating the use of alterative drugs.

GLYCO-THYMOLINE FOR COLON FLUSHING:—Inactivity of the colon with its retention of fecal matter and consequent distention and interference with the work of the rectum is a prime factor in the causation of hemorrhoids, constipation, and, in the event of septic matter in the feces, auto-infection.

The rapid elimination of all septic matter, and the promotion of an aseptic condition of the intestinal canal is within the province of Glyco-Thymoline. One pint of a ten per cent solution at a temperature of 100 degrees introduced well up into the colon will produce a quick evacuation without pain or discomfort. This followed by three or four ounces of a twenty-five per cent solution at the same temperature, retained, will speedly restore to normal conditions by inducing exosmosis, relieving pain by its anesthetic property and promoting a general aseptic condition by its power of cleansing.

FEDERAL ANTI-NARCOTIC LAW AND GLYCO-HEROIN (SMITH):—The composition of Glyco-Heroin (Smith) has not been changed to meet any of the exemptions or privileges allowed under the so-called "Harrison Anti-Narcotic Law," and whereby it might be sold to the public.

Glyco-Heroin (Smith) will remain just what it always has been, and just what it was always intended to be, viz: a stable, uniform and dependable product for the convenience and use of physicians only, in the treatment of Cough, Bronchitis, Whooping Cough, etc.

In prescribing Glyco-Heroin (Smith) use ordinary prescription blanks. Give the name and address of patient, your own name and address in full, your registry number and date when written (no copy or other record required). Prescriptions cannot be refilled.

SANMETTO is prepared from crude raw drugs and not from fluid extracts of uncertain or unknown composition as are substitute imitations, and contains no opium, coca leaves, cocaine, heroin, nor any compound, manufacture, salt, derivative or preparation of opium or coca leaves, and no narcotic and no depressant drug of any kind excepting the small amount of alcoholic solvent mentioned on label—and may be prescribed and dispensed without the use of the Harrison Anti-Narcotic Prescription Blank.

A SPLENDID PRESCRIPTION:—In his sermon at Vine Street Christian Church, on Sunday, April 25, Dr. Carey E. Morgan suggested the following: "Take one part gratitude, one part hope, one part patience, one part courage, one part faith, and all the love you can gather from the garden of your heart, and mix well and take morning, noon and night. It is a tonic, an elixir, a specific, an antitoxin, a quarantine and a cure." Try it!



Some Important Memoranda for Busy Physicians:—We have recently received from the Fellows Medical Manufacturing Company a booklet with this title, which is one of the excellent and practical contributions for which we are indebted to this company. The brochure contains many important items which have not yet gotten into the texts, beyond some pages devoted to Twilight Sleep, Osler's Spots and certain diagnostic signs and reactions, it is devoted to those laboratory tests which the physician should himself make. Concisely and clearly there are given reactions and reagents, signs, solutions, stains and staining methods, tests and test meals. Nowhere have we seen so much of indispensable information given in such compact or more available form.

"WHATEVER BE THE NATURE OF RHEUMATISM AND GOUT, every practical physician realizes that they are amendable to treatment and that it is a matter of as much importance to open the doors by which the poison goes out as to close those doors by which it comes in. Hence prompt and thorough elimination must be obtained through the liver, the kidneys, the bowels and the skin."

For accompilshing this purpose there is no remedy equal to *Tongaline*, which has been so successfully used for thirty years in the treatment of rheumatism, neuralgia, grippe, gout, nervous headache, malaria, sciatica, lumbago, tonsillitis, heavy colds and excess of uric acid.

COD LIVER OIL FOR CHILDREN:—There are few remedial agents which operate with such marked beneficial effect as cod liver oil in the debilitated states of children, but so far as the crude oil is concerned its unpalatable nature makes it quite impossible of continued use in these little patients. For this reason a cod liver oil product that is not only palatable, but which may be continued for a considerable length of time, becomes all the more desirable. Such an agent is to be found in Cord. Ext. Ol. Morrhuae Comp. (Hagee), in which are combined the active therapeutic principles of the oil without its obnoxious properties.

THE CORONA FOLDING TYPEWRITER is a thoroughly up-to-date machine, equipped with all the latest and most approved time and labor saving devices. Small and light enough to be carried even in an aeroplane. Enclosed in its case it measures 10x12x4 inches—its weight only 5 3-4 pounds, the case weighing about 2 1-2 pounds. Admirably suited to a doctor's use. Its price being much less than that of the more cumbrous machines that are no more serviceable. Write to Myers & Co., Second Ave., N., and Union St., Nashville, Tenn., for price, terms, etc.

"THE REASON WHY":—A most attractive brochure has just been issued by the New York Pharmaceutical Company under the above title. This booklet presents the therapeutic uses of that well known product, Hayden's Viburnum Compound, as well as some authoritative statements of its value in the treatment of Dysmenorrhea, and other Gynecological conditions, by doctors of renown. A particularly comprehensive and clinching argument as to the therapeutic value of Hayden's Viburnum Compound, is the authoritative text book references given therein, as to the medicinal value of the principal ingredients used in compounding Hayden's Viburnum Compound.

Upon request the New York Pharmaceutical Co., Bedford Springs, Bedford, Mass., will send you a copy of the booklet, "The Reason Why." Write them for it. It is well worth having on your desk for reference.

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

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### Selections

A STUDY OF PILOCARPIN:—The nitrate of pilocarpin is the preparation of the active principle usually used. Hypodermically the dose is gr. 1-12, per os gr. 1-6. It may be given every fifteen minutes to effect, if sweating be desired, or every hour or two for sedative effect.

Pilocarpin is an example of the double action of a drug through modification of the dose. In a small dose it cures ptyalism; in larger dose, it is opposite in action, it produces ptyalism. In small dose it is an arterial sedative, lessening rapidity of the heart action and reducing temperature. In sthenic cases it is often to be preferred to aconitin. In large doses it is antispasmodic, as in rigid os uteri. It produces profuse perspiration, ptyalism, sometimes vomiting. All the secretions are augmented, the urine, saliva, sweat, bile, tears, gastric juice, milk and bronchial mucus.

Pilocarpin is useful in jaundice to relieve itching. Here the dose is small and continued at intervals to effect. a diaphoretic it is unequalled. In acute pulmonary diseases, due to cold, a full dose will often break the attack. In acute rheumatism, also, the attack may be jugulated by a full hypodermic dose of gr. 1-12 to 1-6. It relieves the acute pain and the swelling very promptly. It is a valuable remedy in eclampsia, to produce free elimination, administering veratrin to reduce the pulse. Also in uremia, for pilocarpin not only increases the water of the urine, but also the urea, and urea is thrown off in quantity through the skin. It is a positive remedy for all muscular pains. Lumbar myositis, lumbago, is often relieved by a full dose when other remedies fail. Pleurodynia and torticollis are benefited, as are severe abdominal pains of a colicky nature. It will jugulate an attack of parotitis. Hiccough is frequently stopped by a timely dose. Pleurisy is rapidly relieved by pilocarpin, in conjunction with bryonin.

In the eruptive fevers, with slowness of development of the eruption, pilocarpin is indicated. It is a specific in erysipelas of the sthenic type. It is one of the best means for breaking the chill of malaria. Asthma, pertussis, edema of the glottis, mania, dryness of the mouth from any cause, are all very successfully treated by pilocarpin. In eye, ear, nose and throat diseases it has an important place. serous iritis, plastic and traumatic iritis, in rheumatic iritis. it absorbs the exudate rapidly and relieves the patient of his discomfort. In traumatism of the eye, with effusion of blood into the aqueous or vitreous, in retinal hemorrhages and separation of the retina, it has seemed to be of use, causing absorption of the blood. In some cases of deafness it has either lessened the amount of deafness or cured it entirely. It is often useful in tonsilitis in the early stages. In atrophic rhinitis and laryngitis it relieves. It stimulates the growth of the hair, applied locally and given internally and is said to darken it in color. It removes serous effusions and is indicated when there is dryness of the tissues or atrophy of mucous structures. Pilocarpin is antagonistic to atropin and, if too profuse action of the former occurs, atropin will counteract that effect. It is contraindicated in weak heart or depression.—R. J. Smith, M.D., in Northwest Medicine.

THE SMALL TOWN VS. THE CITY:—The question is often asked by young men if one cannot obtain a practice much more quickly in a small town than in a city. In the small town one is apt to obtain a practice more quickly, but at the same time he reaches the limitations of the locality more quickly. If no pent-up Rochester confines his powers he puts Rochester upon the map. It is a matter of the individual then rather than the size of his town. In the large city practice comes more slowly, and there as in the small town the doctor is again limited by his own limitations only. If one goes to the small town in order to gain practice

quickly, with the intention of returning to the city later. it will be a mistake almost inevitably. It is a very exceptional case in which a man with the most excellent local reputation has been able to return to the city and gain any foothold. I have known many pathetic instances in which men having gained positions of importance in the small towns have come to New York, failed to get a foothold, and on returning to their original towns, have never regained prestige, because of general knowledge of the fact that they had not succeeded in remaining in the city. In the cities one meets opposition step by step and adapts himself slowly and surely to the environment. All of this is done so instinctively that the complex of steps cannot be explained, and yet it represents a fact which cannot be gainsaid. The doctor who makes a success in a small town and then moves to the city usually makes the mistake of his life. So does the doctor who removes from the city to the small town. People are curious about it and ask why he did not remain in the city.

In the smaller towns we find an odd professional feature in physicians who are afraid of their patients. Unless they are men of strong character and convictions such doctors may assume an attitude of toadyism toward important townsmen, who are extremely quick to notice such an attitude. Not long ago a social leader from one of the smaller cities came to the office asking me to take charge of her case in New York. I said, "This is perfectly absurd; Dr. X of your town is a man whom you may trust, and it is much better for you to remain under his care there than to take my time." She replied: "No, I will not allow him to treat me. He adopts all of my suggestions, and I can have no confidence in a man of that sort."

Dr. H. has a first-rate clientele in a Western town, but wishes to come to New York to practice and has asked my advice. I tell him that the Mayos did not come here, but some of our best patients leave New York and go out to them.

While there is no intrinsic indifference between physicians who practice in the city and those who practice in the country, the chances for development are apt to be greater in the cities, for the reason that one is always surrounded by men who are still better than he. (Pardon the paradox.) In the smaller towns a man of superior natural qualifications is apt to become an autocrat, and becoming an autocrat, begins to deteriorate according to the rules of natural law.—Robt. T. Morris, M.D., in The Post-Graduate.

AMERICA'S MEDICAL SUPREMACY:—An editorial writer in a recent issue of the Long Island Medical Journal expresses the fear, or the threat, that the American post-graduate medical student will not be persona grata in Germany and Austria in future if the people of this country do not speedily shift their sympathy from the Allies to the Austro-Germans. We do not share the apprehension of our esteemed contemporary, for by the time this war is over American dollars will look as big as cartwheels to a Privatdozent in Vienna or Berlin, and his only distress will be to find that they are not to be picked up so readily as they were before the politicians brought on the war and spoiled his market. Spoiled his market will surely be if the war lasts over another winter, for American students have been discovering their own country this year and are now learning by necessity what they have often been told, but refused to believe, that the facilities for post-graduate medical instruction are as good in half a dozen cities of the United States as they are in any city in Europe. And why should they not be? The best surgeons in the world are Americans: internal medicine is nowhere further advanced than it is here; some of the greatest discoveries in medical science have been made in this country; nowhere are the specialties studied and practiced with greater zeal and more brilliant success

than among us, and our research laboratories, though of more recent growth, need not fear comparison with those of Europe.

We reached this point while Europe was still at peace and the universities in every country were teeming with scientific activity. Now all the young blood of the laboratories has been drawn into the army and much of it has reddened the snows of Poland, France and Belgium, the universities and laboratories meanwhile marking time with the problems of military medicine, with no opportunity for following the antebellum lines of scientific research. Here, however, study and research are unaffected by the transatlantic insanity, and if with the advantage of a nearly even start America does not now leap ahead and take admittedly the first rank in the world of medicine, it will have lost the opportunity of a century. But it will not lose. auring the last decade foreign medical men have been coning here in increasing numbers to observe our progress and study our methods, and if these scientific pilgrimages from the East to the West do not increase in number and volume when the war is over and the former combatants have recovered their breath and earned the wherewithal to travel, it will be a strange thing and discreditable to America. There will, of course be many Americans going to Europe, for one can always gain something by observing things from a new angle, even if this angle is no better than one's own, but the number of such will be far smaller than before, and the average American will be content to get his post-graduate instruction in his own country, for he will know that he cannot get better, if as good, in any other land.—Med. Record.

A NEW SYMPTOM FOR THE EARLY DIAGNOSIS OF PULMON-NARY TUBERCULOSIS:—This symptom was described for the first time by the Italian Physician Lombardi (*Giorn. Intern.* Delle Scienze Mediche, September, 1914). It can be detected by simple inspection, and consists in the early appearance of venous varicosity near the spinous apophysis of the seventh cervical and the first three dorsal vertebrae. These varicosities, which may be very small, and at times accompanied by slight edema and spontaneous pain, in cases of lesions of the apex of the lungs, are to be found in 88 to 90 per cent of cases. Dr. Lombardi calls this sign "The Varicose Zone of Alarm." This is the way that he explains its causation:

"The spinal-dorsal net has branches that, passing through the transverse apophysis, unite in the neck with the vertebral veins and with the intercostal veins in the chest. The vertebral veins emerge from the transverse apophysis of the sixth cervical vertebra and terminate in the innominate. The intercostal veins of the first two or three spaces of the left side reunite near the vertebral bodies and form the left superior intercostal vein, with the homologous bronchial vein. On the contrary, on the right side, the superior intercostal vein empties into the azygos major."

The cutaneous zone studied by Lombardi as the seat of varicose veins, is a tributary to the small dorsal branch which, uniting itself with the small spinal branch, constitutes the dorsal-spinal root of the intercostal vein. Besides it must be remembered that the superior lobes of the lungs are tightly packed within the three first ribs, and that they occupy the space between the sixth cervical vertebra and the third spinal apophysis, where the varicose zone of alarm appears. By remembering these anatomical facts, we can understand how any infiltration of the pulmonary apex interfering with free venous defluxion will cause, first, a blood stasis, and then a varicosity in the superficial veins, so that bronchial adenopathies will compress the left superior intercostal vein and at the point where it crosses the aortic arch; that the hardening of the pleura may produce a stenosis of it or of one of its tributary branches; but while in similar cases or even in asthma, bronchitis, emphysema,

the cutaneous varicosities will appear irregularly on the back and on the chest and especially in the lower regions, in cases of incipient tuberculosis they will be found almost always and only in the zone of alarm that has been described, and more frequently in lesions of the apex. (Rivista Ospidaliera, 1914, No. 21. From the Rivista Medica, Milan, January 20, 1915.

Aconitine to Reduce High Blood Pressure:—After years of experience with this drug Dr. William H. Thomson (Amer. Jour. Med. Sci., Jan., 1915, p. 77) has come to look upon aconite as the most satisfactory vasodilator, and he finds this drug particularly indicated in the treatment of interstitial nephritis. The vasodilator drugs most frequently used are the nitrates, including amyl nitrate, nitroglycerin, potassium nitrate and erythrol tetranitrite. These preparations are objectionable and unsatisfactory, according to Doctor Thomson. Not only do they act very suddenly and abruptly, but their action is very evanescent and therefore practically useless in the treatment of a chronic, persistent morbid condition, such as we find in arteriosclerosis, interstitial nephritis and selerosis of the nervous tracts.

In every respect aconite is superior to the remedies of the nitrite class. One very important result of its use is an increase in the elimination of urea; and since the chief business of the kidneys is to eliminate urea, and since also in interstitial nephritis the quantity of urea excreted is diminished from the very beginning, the importance of a remedy which will increase its output is very apparent.

Doctor Thomson declares that in a series of cases under his care in the Roosevelt Hospital, the quantity of urea eliminated following the administration of aconite was doubled in a large proportion; in two cases it was increused to three times the amount present before this treatment was begun. At the same time there was improvement in all the other nephritic symptoms, including shortness of breath, vertigo, anginose pains, and melancholia, as illustrated by a number of cases which Doctor Thomson describes.

Doctor Thomson advocates the use of the old 35 per cent tincture of aconite (U. S. Pharmacopeia of 1809) instead of the later preparation, which is only 10 per cent. He says that he has given as much as ten drops of this stronger tincture four times a day with excellent results. Large doses are necessary, since "the proper dose of a functional medicine is not reached until it causes its own symptoms."

The importance of employing a preparation of aconite which can be depended upon will naturally suggest to many of us the more or less unreliable galenical preparations. Aconitine can be safely pushed "to effect" in the conditions described.

THE PROSTATE:—Among the most common and tormenting ills of old age, and frequently of middle life, is the enlargement and inflammation of the prostate gland. quently in old men it becomes malignant. The catheter. while often indispensable, increases inflammatory conditions, unless it is used very carefully, and a Nelaton at that. The smallest one should be used, when possible, but if the amount of mucous and blood choke it up, of course a large one is necessary. Where there is so much mucous, the bladder should be flushed with a hot sterile solution of boric Cases will go on dribbling till the bladder becomes enormously distended. The viscus becomes distended to a certain point where the nerves are so obtunded that sensibility is lost. Cases occur sometimes where three quarts of decomposed urine are evacuated at one time. rhage into the bladder, with obstructive hypertrophy, is a grave trouble, and removal of the central lobe, which curtains the prostatic urethra, is absolutely necessary. There is no doubt but that in a majority of cases in old men, where

they have been of long standing, the gland becomes scirrhosed; and such condition being irremediable, death results soon. As a rule, however, it is the middle and not the lateral lobes which overlap the vesico-urethral orifice and so seriously obstructs the outflow of the urine.

Prostatic disease is slow and often insidious in its development. The victim realizes that it is much more difficult to micturate, but he attributes it to the naural disability of age. Gradually the trouble becomes more serious. He has pain, a sense of weight in the pubic and perineal region, and a tormenting and irresistible desire to empty the viscus. He gets only temporary relief. The urine becomes foetid, dark, weak coffee colored, and mixed with thick ropy mucous. Now he begins to relieve himself with a catheter and then gradually the "combat thickens."

The treatment, while not curative, can afford great relief and prolong life. Hyoscyamus, belladonna, alkaline solutions such as potassium citrate, dionin as an anodyne; diuretic, alkaline mineral waters; the antiseptic urotropin tablets, or cystogen-lithia tablets which contain formaldehyd, are excellent. Frequently a rectal suppository containing extract of hyoscyamus, extract of opii, ichthyol, and oil of theobromates inserted at bedtime produces good results.—Charlotte Medical Journal.

FUCHSIN IN CHANCROID:—Fuchsin in a 5 per cent ointment with petrolatum has been found of benefit in the treatment of carbuncles, and this led the author to try it in soft chancres. Nine cases of undoubted soft chancre showed so much benefit that he is convinced there is no other drug which is so useful. Under ordinary treatment soft sores take about six weeks to heal up, while with fuchsin he has been able to heal them in less than two weeks. The average duration of treatment was eight days. One case was complicated with bubo in the left groin as large as a small orange. With fuchsin ointment the chancroid healed in

six days, and the bubo, which had threatened to suppurate. at once subsided. The ointment of fuchsin (aniline red) is applied to the chancre, after first washing and then drying it. If the prepuce can be brought over the glans penis no other dressing is required, although it is to be noted that fuchsin stains the linen red. The author requires the patient to clean the parts and apply the ointment twice a day, simply because it is difficult to get poor people to learn the benefits of keeping clean. Otherwise, in his opinion, a single application in twenty-four hours quite suffices. Preliminary aplication of caustics, such as nitric acid, to destroy the superficial bacteria and infected tissues is not at all necessary. The ointment, even when applied to the most foul ulcers, clears up everything, and within forty-eight hours granulations always spring up. The effect of fuchsin seems to correspond in some respects to that of scarlet red -viz., rapid epidermization; but besides this there is an antiseptic effect. Fuchsin ointment of greater strength than 5 per cent may irritate the parts. It is of no benefit in hard chancres.—C. H. Kantawala, Lancet.

GERIATRICS:—I. L. Nasher, in American Medicine for November, states that some are aged before they are old, some are old but not aged. Geriatrics deals with the senile state. not with the years of life. In maturity nature cures, in senility nature kills. Aid nature in maturity, prevent death He advances some geriatric aphorisms, of in senility. which those relating to therapeutics are as follows (1) Rule, increase dose of stimulants and decrease dose of sedatives; (2) Never give drugs in anticipation. Wait till the indication for the use of the drug is clear and stop its use when the desired effect is produced; (3) When KI, has ceased to lower the blood pressure in arteriosclerosis, its further administration is harmful; (4) Belladonna prevents the griping of aloin by counteracting the peristaltic stimulation of the latter. Much smaller doses of aloin can be given

if the belladonna is omitted; (5) Secondary effects of drugs may act more powerfully upon the senile organism than the primary or desired effect; (6) Morphin is a powerful respiratory depressant in the aged. If given per os, atropin should be given a few minutes later; if given hypodermically, they should be given together; (7) No cardiac stimulants while compensation is complete; (8) Drugs containing tannin are absorbed slowly or not at all; (9) Mineral oil in large doses does more harm than good. It coats the intestinal walls, interfering with the secretion of the already diminished intestinal juices; (10) Drugs act differently upon senile degenerating tissues than they do upon the normal tissues in maturity. They should be given singly if possible, and the action of each determined in each individual case.—Cleveland Med. Jour.

LIQUID PARAFFINE FOR INFANTS:—Hill, in the Archives of Pediatrics for February, in discussing the use of liquid paraffin in infants arrives at the following conclusions:

- 1. In the chronic constipation of infants, liquid paraffin in large doses gives the best results we have yet obtained.
- 2. In severe gastroenteritis and ileocolitis its use was disappointing, possibly because too small doses were given.
- 3. In conjunction with lactic acid bacilli very remarkable results may be obtained in that group of diseases which are caused by the action of putrefactive or allied poisons absorbed from the intestines and finding a favorable, susceptible, sympathetic nervous system.—Indianapolis Med. Journal.

ADRENALIN IN BRONCHIAL ASTHMA:—Ephraim announces that adrenalin is an invaluable aid in the treatment of chronic bronchial asthma. We have given it in several such cases with marvelous effect, where on previous occasions large doses of morphine were required to control the attacks. The dose is 15 minims given subcutaneously.—Nevada Medicine.

NEW THERAPEUTIC MEASURES IN TYPHOID FEVER:-The surgeons are not the only ones who are applying their resourcefulness in trying to solve the many important problems arising in the present war. The internists are also profiting by the vast amount of material at their disposal in the various military hospitals. Typhoid fever is the disease which as usual is engaging most attention in this respect. In the Presse Medicale, January 14, 1915, there appear two papers in which are reported new routine methods of treating typhoid fever. M. E. de Massary advocates the use of continuous refrigeration of the abdomen by means of an ice bag, the skin being protected by a thick layer of talcum powder and a piece of light flannel. conjunction with this measure there is enforced absolute rest, and the patient is given a large amount of water to drink. This method was employed in 140 patients with a mortality of 8.5 per cent. In the second paper E. Weil extols the use of the Murphy drip as an efficient procedure in combating typhoid fever. The solution used is a liter of water at 40°C., containing 50 grams of glucose. both nutritive and diuretic properties, reduces the temperature of the patient, and in other respects improves his condition. The nervous manifestations particularly are said to be relieved.—Medical Record.

TREATMENT OF PELLAGRA:—Dr. Isadore Dyer of New Orleans recommends quinine hydrobromide in pellagra, reporting (Texas State Jour. of Med.) results based on an experience of seven years, with nearly 100 cases, without the loss of a single patient treated entirely by himself. Regarding this drug, Dr. Dyer says: "I consider it as nearly specific as any drug mentioned by anyone who has until now written about the disease." In mild cases he gives from 2 to 5 grains three times a day, and in severe cases as much as 10 grains every two or three hours, night and day, for a period of four or five days.

IODINE AND ICHTHYOL IN FURUNCULOSIS:—F. Berger's method of treatment when the furuncles are soft consists in the free application of tineture of iodine to the part, well covering the surrounding tissue. Should any of the furuncles be ready to break, an incision may now be made without fear of local infection. A piece of gauze, spread with 10 per cent ichthyol vaseline, is now placed over the iodine and supported by plaster or a bandage. Next day any pus which may have broken through is wiped off, the ointment is removed with benzin, and the application is repeated. As soon as all the pus has been discharged, iodine applications are stopped, but the ichthyol is continued until inflammation has subsided. Where the furuncles are still hard and nodular, iodine is applied freely as in the other case, and pure ichthyol applied thickly over it. This may be allowed to dry, or it may be covered with cotton wool held in place by adhesive plaster. Next day the dry ichthyol is removed with warm water, and a fresh application of iodine and ichthyol is made. Iodine is continued until all inflammation has subsided, unless irritation be produced, in which case it is stopped. Berger claims that this treatment has a marked influence on all staphylococcic foci; it is painless, rapid and simple.—Critic and Guide.

TREATMENT OF ACUTE PNEUMOCOCCUS PERITONITIS:—When a patient is seen suffering from acute diffuse pneumococcus peritonitis, every effort should be made to support the patient, and with proctolysis or continuous hypodermoclysis, Fowler's position, camphor stimulation, and the withholding of all fluids and solids by mouth, and attempt to tide him over until the acute stage passes. The localized abscess, whether subdiaphragmatic, pelvic, lumbar, or between loops of intestine and the abdominal wall, may be opened with comparative safety and effectively drained.—L. Miller Kahn, in the New York Medical Journal.

MEDICAL ERROR:—Young men think the practice of medicine is a perpetual picnic. That it is "easy money." They see doctors in fine offices, and rushing to and fro in machines, and they imagine such apparent luxuries "come easy." The consequence is that many choose the profession, to find that it is not the picnic they thought it was. To be sure, there are bright times and compensations for our labor and sacrifice, but it takes time, patience and close attention, as well as hard study, to make success and money.

There are many physicians who don't ever read current medical literature, and unless they do, they are bound to fall behind in the "New Medicine," as Dr. Maclaren said, in the "Bonnie Brier Bush." Many doctors are too fond of "Ball"—basket and base. If one would succeed, he must keep his office well, and his office will keep him. The truth of the matter is that there are too many professional men, both in medicine and law. We have pettifogging lawyers and empirical doctors. I have heard doctors say that they amused the patient, and Nature cured the disease. It only proves that too many lose faith in the curative power of medicine, because they don't apply remedies intelligently. There is nothing the matter with the medicine, but there is often lots the matter with the doctor.

Keep up with the advance in medicine, by application and studying current medical journals.—Editor, Medical Summary.

Pollution of Lakes a Menace to Health:—In his annual report, Surgeon-General Rupert Blue, of the Public Health Service, points out the fact that the pollution of the Great Lakes and tributary rivers is becoming a serious menace to health. He says that about 16,000,000 passengers were carried each year over the Great Lakes and that more than 1,600 vessels use those waters. It is thought by Dr. Blue that these inland vessels play an important part in the maintenance of the high typhoid fever rate in the United States.—N. O. Med. and Surg. Jour.

PITUITARY EXTRACT IN OBSTETRICS:—Druskin calls attention to the fact that during pregnancy the pituitary gland becomes enlarged, reaching at the end of pregnancy almost double its original size. After pregnancy involution takes place, but the gland never again shrinks to its original size. The author reports thirty-four cases, in which he used pituitary extract. The extract, like any other therapeutic agent, must be used with discretion and judgment; its use is safer than any operative procedure in obstetrics, consequently no forceps, no pubiotomy, no Cæsarean section in the lesser degrees of pelvic contractions, no forcible dilatation of the cervix should be tried without previous use of pituitary extract. The third stage of labor is always shortened by this preparation; no Crede nor manual separation of the placenta should be attempted without it. The best method of administration is intramuscular. jection is not accompanied by pain and the effect is prompt. Amer. Jour. of Obstet.

FRACTURES OF THE NECK OF THE FEMUR: ITS TREAT-MENT:—A careful study of 112 cases of fracture of the neck of the femur leads John B. Walker, New York (*The New York State Medical Journal*, December, 1914) to the following conclusions:

- 1. Fracture of the neck of the femur occurs under fifty years of age more frequently than was formerly believed.
- 2. Any injury to the hip followed by disability should suggest the possibility of a fracture of the neck, and requires an expert examination aided by an X-ray photograph.
- 3. Reduction of the deformity with complete immobilization of the fracture during the period of repair by means of a plaster spica bandage is advised in all suitable cases.
- 4. This is to be followed by early gymnastic movements, active rather than passive.
- 5. All weight-bearing upon the fracture is to be avoided for from four to six months; in some cases even longer.

TREATMENT OF CHRONIC URTICARIA:—Weill, Gardere and Govet report the case of a child of eleven years, subject for four years to chronic urticaria and suffering daily from a generalized eruption, in which a cutaneous injection of 0.5 gramme of sodium nucleinate in ten c. c. of normal saline solution led to a marked improvement lasting over The leucocyte count showed within fourteen cwo weeks. hours after the injection a rise from 8.500 to 20.400. This number underwent rapid reduction to normal in the succeeding days, but the beneficial effect on the urticaria persisted much longer. The authors believe the nucleinate prevented the urticarial manifestations by overcoming toxines in the system through increase in the number of leucocytes and stimulation of their phagocytic function.—Nevada Medicine.

COMPOUND FRACTURES:—At the present time it is not considered advisable to enlarge the wound nor to irrigate in compound fracture, unless dirt or some infective material is in the wound. The old maxim, which considered every compound fracture as infected, is not sound nor borne out in practice. Today, unless there is evidence of foreign material in the wound, it is better to simply clean the wound surface and apply sterile dressings and iodine. In such cases, water, fingers, instruments and dressings in the wound are sometimes infective media, notwithstanding the ordinary measures of cleanliness.—Dr. W. W. Grant, (Col. Medicine.)

MAGNESIUM SULPHATE IN CHOREA:—Feliziani (Policlinico) finds magnesium sulphate an almost certain remedy. It is given as intraspinal injections, 3 c.c. of a 25 per cent solution being the maximum dose. The salt used must be perfectly pure, and the treatment should not be employed in advanced or chronic cases, or where there is malnutrition or any other disease besides the chorea.

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## Griginal Communications.

### HOW SHALL WE TREAT APPENDICITIS.

BY M. C. M'GANNON, M.D., C.M., F.A.C.S.,

Professor of Surgery and Clinical Surgery, Vanderbilt Medical Dept.; Surgeon-in-Chief to the Woman's Hospital, State of Tennessee.

The time has not yet arrived when an apology is necessary for an article upon the subject of appendicitis.

Medical men, both internists and surgeons, are agreed upon the fact that many cases of appendicitis offer problems in diagnosis that may, and do, puzzle the most experienced practitioners. When, however, the symptoms are so pronounced that the disease can be recognized, they are still far from having a crystallized opinion as to the proper line of treatment to be adopted.

With the hope that I may be able to aid in arriving at a correct conclusion as to the proper conduct of such cases, it is my desire to present for your consideration a report of the cases of appendicitis that have come under my care during the year of 1914. By the aid of this I hope to show what is the safest method of treatment of such cases.

During the year of 1914 I had referred to me:-

- 134 Cases in all stages of the disease.
- 132 Cases were operated upon.
  - 2 Cases were dying of peritonitis when I saw them, and were not subjected to operation.
  - 68 Cases I classed as chronic. In each of them the diseased state was sufficiently manifested as to be readily recognized by the visitors and assistants at the operation.
  - 66 Cases were acute, and of these four died. The acute cases came under my observation:—
    - 4 On the first day.
    - 19 On the second day.
    - 12 On the third day.
    - 13 On the fourth day.
    - 10 On the fifth day.
    - 2 On the sixth day.
    - 2 On the seventh day.
    - 3 On the eighth day.
    - 1 On the ninth day.

Those that died after operation were seen, one on the seventh day, one on the eighth day and two on the fifth day.

These four cases were all suffering with general peritonitis; though not deemed moribund at the time, they were submitted to operation. The gravity of these conditions, however, were recognized both by their friends and by the consulting physicians. The two who were moribund when seen by me, each had been sick five days.

Before taking up the treatment of this disease it may be well to consider briefly the pathology of appendicitis.

The inflammatory condition begins in the mucous membrane and may be diffuse, affecting it in its entirety, or it may be circumscribed and expend its force upon a small part of it. The inflammatory process may subside without involving the muscular and peritoneal coats of the

vicsus, or it may, and more usually does, affect one or both. It may end in resolution, or it may proceed to any degree of destruction up to complete necrosis of the whole organ.

The chief symptom, pain, unfortunately is not a sure index of the destructive force of the disease and hence cannot be relied upon as a guide to treatment.

The pain may be due to different causes. It may come from obstruction of the outlet of the appendix by a kink or lith, or by the inflammatory swelling with distention of the lumen of the organ beyond the point of obstruction; or it may be due to the irritation of the poisonous material within the appendix, or it may be due to the inflammation extending to the peritoneal coat.

If the pain is to be explained by any of these causes, we would not expect it to be very severe unless the appeadix was in proximity to the parietal peritoneum, since we know that the serous lining of the abdominal wall is the only very sensitive part of the peritoneum. Clinical experience bears out our anticipations, since as a matter of observation the pain in any stage of appendicitis is far from agonizing.

Tenderness varies very much, depending upon the situation of the inflamed organ. If close to the anterior abdominal wall, it may be very marked even when the pathology is not great, and on the other hand, if it be deeply placed underneath gaseous dilated intestinal coils, there may be but little tenderness.

Rigidity of the overlying muscular wall, while usually of great diagnostic value, sometimes fails us if we attempt to use it as a guide to therapeusis, since, like pain, it is influenced by the position and condition of the inflamed structure. At times, it will be marked, with no great pathology existing, and again it may be almost, if not quite, absent when the appendix is actually necrotic.

Fever, too, canot be relied upon as an index to therapeutic measures, since it is the experience of every practi-

tioner to see severe cases in which there is but little, if any, elevation of temperature.

A leukocyte estimate may help in diagnosis, but the majority of practitioners are not prepared either by experience or training to make an efficient blood examination, and it is of little value as an outline to treatment.

The symptoms I have mentioned, taken as a whole, may form a picture sufficiently plain for diagnostic purposes, but it cannot be relied upon to inform us in regard to the progress of the hidden pathology, as many men have found to their chagrin.

That the disease is essentially a surgical affection, is admitted by all authorities, and this is further proven both by its pathology and its course. No medicines that we possess have any power to stay or control the progress of the affection. This does not mean that there is no medical side to appendictis.

The general practitioner is usually the one first to see the sufferer, and upon him devolves the responsibility of making the diagnosis and outlining the treatment. He is looked to for relief from the suffering, and he is the one whose duty it is to protect the patient from the unwise doping and purging, insisted upon by the family and friends. He, too, is the counsellor, upon whose advice the patient and family depend, in determining whether a surgeon shall be called or not.

The time has now arrived when he must bear the censure of the public if he calls the surgeon too late.

Every surgeon, again and again, has had the painful experience of finding himself unable to protect the family doctor from the outspoken blame of "too late." In many cases the delay is due to the wishes of the friends, but these same friends are only too glad in times of disaster to shift the responsibility to the shoulders of the medical adviser who has not been sufficiently insistent.

More and more is the public learning that the disease is

surgical, and requires early operation. Less and less are they fearing and combating what they are learning, viz., that appendectomy is a procedure almost without danger if done in the early hours of the affection. What then is our duty when we have made a diagnosis of appendicitis? Let us for a moment look at the results in the cases I have already set out. All those operated upon while not in an active state recovered. All those subjected to operation during the first two days of the disease recovered without drainage or morbidity, and were out of bed as early as those so treated when in the chronic state. Of those operated upon after forty-eight hours, twenty-nine required drainage and were in bed from fifteen to thirty days, while those that died were not seen by the surogeon until after the fourth day. In each case the hope had existed that a medical treatment would have carried them safely through.

If we turn to the accredited authorities who have written upon this subject, we find that their teachings accord with the results that I have reported. Statistics gathered from all sources further prove that cases in the chronic state or cases in the first day of the disease, equally, if operated upon, have practically neither mortality or subsequent morbidity, while with each day of delay thereafter the danger increases. Why delay?

It is equally well known, and statistics have proven that the disease when not treated surgically has a mortality variously given from 8 per cent to 15 per cent. If we accept the smaller number, that is, a death rate of eighty (80) in a thousand when treated medically, as against one in a thousand if given the benefits of surgical treatment, it is difficult to understand why a delay in the choice as between these two should ever occur. The explanation is found in the optimism and hope that ever exists in the human breast.

Unless the subject is presented in a firm, cold, matterof-fact manner, so that the dangers are well to the forefront, the public will only see the 92 per cent that recover and forget the 8 per cent that die.

There is another reason to account for the fact that both the physician and the patient at times sleep upon their period of grace. It is the erroneous teaching that there is great safety in waiting for an operation in the interval between attacks. A careful consideration of the voluminous reports upon this subject that have been presented, must convince the most skeptical, that to await the interval means a mortality of 8 per cent; that if it is safe to await the interval in one attack it is safer to await for an interval in each subsequent attack, which if true, would wholly eliminate surgery in connection with this disease, except in so far as the surgeon might be called upon to deal with the dangers and disasters which inevitably would arise from such a course.

Again, why await an interval, when the clinical fact remains that operation during the first or second day of the disease is accompanied by no higher mortality than when it is performed in the interval. These facts are fast becoming disseminated amongst the public, and the time is not far distant, if it is not now here, when the medical man who does not counsel operation, as soon as a diagnosis is made, will fail to hold the public's confidence, and as a consequence will find his field of public influence much curtailed.

How then shall we treat appendicitis when the diagnosis has been made? We should recognize at the outset that the disease is a surgical one; that any unnecessary delay in having an operation performed for the removal of the diseased organ is attended by danger, and unless there exists contra-indications to surgical treatment we should firmly counsel immediate operation.

While the preparation is being made to get the patient in the best and safest environment for the operation it will be necessary to reduce pain and to protect him against harmful feeding and more harmful medication. These two duties are often no light task.

The pain, which is usually not severe, may be relieved by application of heat or cold, applied over the site of distress. The icebag or the hot-water bottle probably have no effect upon the course of the disease. If the pain be severe, and especially if the patient is to be transported some distance, a small dose of morphine may be judiciously administered.

Food should be withheld for two good reasons. The first is, the patient does not desire it or require it, and it is doubtful if it will be assimilated. The second is, that undesirable peristalsis follows its ingestion. Water, however, may be given freely, unless there be nausea, when even it should be withheld. Purgatives should not be administered. The practice of giving some active purgative for every pain in the belly has so long existed that it is the first thought of the layman and too often the resort of the physician when the symptoms of appendicitis manifest themselves. medication produces one of two things, and usually both. First, it increases the peristalsis, when the muscular action of the intestine is already too great, as proven by the cramp-like pain of which the patient complains. it causes an outflow of fluid into a viscus already overfilled as a result of the inflammatory process.

It must not be forgotten that the appendix is a part of the gut and differs but little in its anatomical peculiarities from other portions of the intestine; hence a purgative will produce the conditions in it that it would in a coil of small intestine. All are agreed that in obstruction of the bowel a purgative can only do harm, and I unhesitatingly state a purgative is not indicated in any case of cramps in the belly. The chief reason that is advanced for the administration of a purgative is that it may aid drainage from the appendix. How can it do this? Surely the secretions, or fecal matter, found in the appendix in appendicitis are not

crowded into it by an overfilled caecum. In the hundreds of cases upon which I have operated I have not found this to be the condition in a single instance. It is a clinical fact that the caecum is usually empty, and if distended, it is with gas and its own secretions. Hence there is in the caecum no barrier to drainage from the inflamed appendix. What the purgative really does to the appendix is to intensify its waves-like contractions and increase the contents of its already overfilled lumen. In no case does it do any good, and in many it may do much harm. An enemia, repeated if necessary, is of value and often gives much comfort. It will unload the large bowel and the contents of the small intestine being fluid, may be expected to flow through the ileo cecal valves into the emptied large intestine without undue peristalsis.

Appendectomy constitutes the rest of the treatment.

To recapitulate: When a diagnosis of appendicitis has been made our efforts at treatment should be: First, relieve pain; second, keep the stomach empty of everything excepting water; third, prevent the administration of purgatives; fourth, empty the colon by a not too large or forcibly administered enema; fifth, operate upon the inflamed viscus as soon as possible after the diagnosis has been made.

DIAGNOSTIC SIGN OF PERICARDITIS:—One sign of pericarditis, according to J. Thomayer (Casop. Lekar, Cesk.; cf. Wien. Med. Woch., 1915, p. 46), is elicited as follows: When the patient lies flat on his back and the respiration-sound is diminished under the left clavicle, but grows stronger again upon his resuming the vertical position, then the suspicion of pericarditic exudation is proven correct. In the prone position, the pericardial fluid presses upon the left bronchial tube, and this weakens the respirational sound.—Clinical Medicine.

## Selected Articles

### TERTIARY SYPHILIS OF THE LIVER.

BY THOMAS M'CRAE, M. D., F. R. C. P., Professor of Medicine, the Jefferson Medical College.

My particular interest in this subject goes back a good many years to the time when I was the resident in charge of the medical patients in the private wards of this hos-A patient was admitted who volunteered the diagnosis of his own condition as cancer of the stomach. had lost considerable weight, looked very badly, was anæmic, and presented a very definite nodular tumor in the epigastrium. After studying him I felt very doubtful of his having carcinoma, but was uncertain as to what he really did have. The diagnosis made by Dr. Osler was syphilis of the liver, and such the results of treatment proved it to be. The nodular tumor disappeared very quickly, the patient gained rapidly in every way, and has been in excellent health since then. The study of this case interested me in the subject and I have followed it as closely as possible since then. I have now a series of seventy cases, and today I wish to present some of the points which have specially impressed me rather than enter into a detailed study of the whole subject. The results of the study of fifty-six cases in the service of this hospital I have reported previously.\*

Certain points have impressed themselves, in the study of this subject. The first is the relatively slight attention which has been paid to it. The literature on syphilis is perfectly enormous, but the articles dealing with syphilis of the liver are comparatively few in proportion. The second point is the relative frequency of the condition. It is difficult to obtain any figures which are of much value, but my personal impression is that tertiary lesions occur fully

<sup>\*</sup>Amer. Jour. Med. Sc., 1912, CXLIV, 625.

as often in the liver as in the nervous system. The third point is the ease of diagnosis in the majority of cases when one knows about the condition. The fourth point is the satisfactory result of treatment if the diagnosis is made in good time. Some of the more striking features of the series are as follows:

As regards etiology, it is a disease particularly of adult life, the largest number of cases occurring between the ages of twenty and forty years. The largest number in one decade occurred between the ages of thirty and forty years. A comparatively small number of cases occurred after the age of fifty years. It is not a disease of advanced life.

In reference to race, an undue proportion of the cases occurred in the colored race, and I find this to be as true in Philadelphia as it was in Baltimore. A surprising number of colored women are affected; the number is larger relatively than of the colored males, and a great deal larger relatively than of the white females.

Of any possible other factor, alcohol seems to take the first place. Excluding the cases which occurred below the age of twenty years, four in number, there were only five patients in the series who did not give a very definite history of the free use of alcohol; probably a third of the series might be described as having used alcohol to excess. From this it must not be inferred that syphilis attacked a cirrhotic liver in these cases, but the inference seems to be that a liver which has handled large amounts of alcohol is apparently more likely to become the seat of a luetic process.

As regards a definite history of syphilitic infection, excluding the late congenital cases, there was a positive history of a primary lesion in half the series and in a certain number of others there were extremely suggestive features. In all the cases of the late congenital form there was a history of the disease which seemed definite in one or both parents.

Clinical Picture.—The variations at first sight suggest a confusing diversity, but when a series of cases is studied, it is possible to simplify them to a considerable extent. One important point is to separate the symptoms from the liver condition from those due to other associated disease. It is evident that a patient may have syphilis of the nervous system as well as of the liver, or that he may have cardiac or renal disease, or extensive arteriosclerosis. The features of the other disease may predominate and obscure those due to the hepatic changes.

Of the complaints which brought the patient to seek advice the most common was swelling of the abdomen, and next in frequency abdominal pain. Loss in weight occurred in many cases and was often extreme. The complaints ranged over a wide field—jaundice, vomiting, fever, sometimes with chills, and swelling of the legs were among these. In one group which is of particular interest the occurrence of prolonged fever was the striking mainfestation. In several of the patients the diagnosis of tuberculosis had been suggested, and one patient had spent two years in a sanatorium with a diagnosis of tuberculosis. If chills occur in addition to the fever, it is very evident that a mistaken diagnosis may readily be made. The duration of the symptoms before the patient came under observation showed a wide variation. The shortest was a period of three weeks. This patient came with very marked changes in the liver and it seemed impossible that they should have been brought about in such a short time, but the evidence was very definite that the patient's health had been perfectly good previously. The longest duration of symptoms was eleven years. The majority gave a history of illness varying from three to eighteen months. A striking feature in this connection is the variation in the symptoms from time to time in many of these prolonged cases. This is sometimes associated with the occurrence of ascites. Several of the patients had had attacks of ascites for which tapping was required, after which there had been marked improvement for a time. Several of the patients gave a history of alternate periods spent in bed and up and about and at work. I am not aware of any other condition in which we have a history of recurring attacks of ascites with practical recovery in the intervening periods.

A rather striking feature in the history of the patients was the occurrence of pain, variously referred to the upper abdomen, to the upper epigastrium, or to the upper right quadrant. It was rare to have the pain described as being in the back.

Clinical Features.—Certain general conditions marked and attracted attention. One of these was the loss in weight. This was marked in half the cases of the series and in a number of them was extreme. If with this there is jaundice and some anæmia, the patients present a picture quite suggestive of malignant disease. Jaundice occurred in just about half the series. Another general feature was the occurrence of fever, which was present in all but eight cases of the series. In the majority of cases the temperature record was not specially high, rarely going above 101 degrees, but in some there were elevations to much higher figures, in one case to 106 degrees, and with this there were repeated chills. It is easy to understand how the occurrence of chills and fever may suggest various diagnoses, such as malaria or abscess of the liver. should always be kept in mind as a possible cause of continued fever for which there is no definite evident cause.

The blood showed a secondary anæmia, which, however, was not very marked. The average hæmoglobin estimation was about 70 per cent and the red cell count about 4,500,000. The leucocytes were usually about normal and no case showed leucocytosis. The differential count did not show any special abnormality. Ascites occurred in twenty-seven cases of the series, but only thirteen required tapping, which emphasizes the possibility of the rapid disap-

pearance of the ascitic fluid under proper treatment. A positive Wasserman reaction was given by the ascitic fluid in one case. There are several instances in the literature of this finding.

As might be expected the changes in the liver and spleen were of particular interest. The *spleen* was palpable in half the patients; in a number of these the enlargement was very marked, in some instances the spleen extending almost to the navel. This had led to a diagnosis of splenic anæmia in several cases. In reference to the changes in the liver itself, the great majority showed some marked alteration, and a study of this showed that most of the cases fall into one of three groups.

- (1) The liver shows general enlargement, in the majority of cases the organ being comparatively smooth. There were twenty-seven cases in this group.
- (2) The group in which the liver shows definite nodules. There were twenty-one cases in this group.
- (3) The group in which the liver shows marked general enlargement and also very marked prominences. This occurred in eleven cases.

The remaining cases of the series could not be classified definitely, as they showed features of two of these groups.

It is evident that without a knowledge of the condition these changes in the liver may lead to an erroneous diagnosis; for example, in the group with general enlargement, chronic passive congestion or amyloid disease might seem to explain the condition. Hepatic abscess might be considered, especially if the patient has high fever and chills. In the second group, with the nodular enlargement, malignant disease is especially suggested, but in others the changes may be regarded as due to tuberculous peritonitis. In the cases with the large, round prominences, malignant disease is most likely to be considered.

Diagnosis.—In reference to mistakes the cases may be put in three groups:

- (1) Those in which the hepatic features are missed entirely. A number of things may contribute to this; for example, if cerebral syphilis is present as well, all the attention may be directed towards this and the involvement of the liver overlooked. If the patient has cardiac disease, as many of them are likely to have, it is easy to regard the enlargement of the liver as due to passive congestion. The mistake which is most removed from the truth is to make a diagnosis of tuberculosis, as was done in several of this series. It is evident that this error is particularly likely to be made in the patients who have continued fever over a long period of time.
- (2) The group in which abdominal disease is recognized but its nature is not determined. Here tuberculous peritonitis, carcinoma of the peritoneum, and carcinoma of the stomach are the most probable diagnoses. With the diagnosis of carcinoma the duration of the disease may be the first thing to arouse suspicion.
- (3) In this group the hepatic disease is recognized, but its nature is not determined. The common error is to regard the condition as an ordinary cirrhosis of the liver; abscess of the liver and gall-stones have also been suggested. Several patients of this series had been operated upon for supposed gall-bladder disease.

There are several points which deserve attention as aids in the diagnosis. It is important to realize the frequency of the condition and to know something about the clinical picture. One feature, which is always suggestive, is that the left lobe of the liver is often involved to a much greater extent relatively than the right lobe. This should always suggest the consideration of syphilis. Another point to keep in mind is that a history of ascites which subsided spontaneously or disappeared after tapping to reappear sometime later should excite suspicion. The importance of examining the patient immediately after tapping also deserves emphasis. It may be possible only at that time

to have an opportunity of palpating the liver in a satisfactory way.

Another point worthy of attention is the therapeutic test. Naturally we hesitate to place much dependence upon such a test, but in this disease it is often confirmatory. This is usually strikingly shown in the temperature chart. After iodide is taken a remarkable feature is the rapidity with which the temperature falls to normal. In the majority of cases this occurs within two days and it rarely takes longer than five days. The same marked effect is sometimes seen in the liver and the enlargement may disappear very rapidly.

Early diagnosis is very important. For the patient it means the probability that he will recover entirely, whereas if the condition is allowed to persist, cirrhosis will probably result and then the damage is beyond repair. A correct diagnosis is also important for the surgeon, as it may save him from doing a needless abdominal exploration. Several of the patients in this series have been operated on under various diagnoses. One patient seen recently had two abdominal sections by different surgeons, one making the diagnosis of gall-stones, the other confessing himself puzzled, and making an exploration for diagnosis.

Treatment.—As regards the essential liver condition, this may be summed up in one word—"iodide." Under it alone the hepatic condition may clear up absolutely. Several patients in this series were given salvarsan, but without any very apparent effect on the liver itself. A general syphilitic infection demands treatment with mercury or salvarsan, or both, but the hepatic condition yields particularly to the use of iodide. The dosage does not require to be very large, and in the cases of this series rarely went above 60 grains a day. Tapping should be done whenever the amount of fluid demands it.—Johns Hopkins Bulletin, Maý, 1915.

### Reviews and Book Notices

Infection and Immunity. A Textbook of Immunology and Serology. For Students and Practitioners. By Charles E. Simon, B.A., M.D., Professor of Clinical Pathology and Experimental Medicine, College of Physicians and Surgeons, Baltimore; Pathologist to the Union Protestant Infirmary, the Women's Hospital of Maryland and the Mercy Hospital, Baltimore. Third edition, enlarged and thoroughly revised. Octavo, 351 pages, illustrated. Cloth, \$3.25 net. Lea & Febiger, publishers, Philadelphia and New York, 1915.

Dr. Simon has, in one compact volume of high didactic quality, opened up for student or practitioner the whole subject of infection and immunity. Moreover he deals with a profoundly involved subject in terms that are readily grasped. Its terminology is assimilated without conscious effort by the reader.

The author has not failed to note and comment upon every addition to our knowledge of this subject. The consideration of anaphylaxis; active and passive immunization; auto and normal serum therapy; ferment and allergic reactions; the chemo-therapy of the pneumococcus and of cancer, and the serum diagnosis of pregnancy have been notably developed.

The recent advances in the study of Abderhalden's protective ferments and the associated technic are exhaustively presented. The section on the Wasserman reaction has been entirely rewritten. Detailed consideration is accorded methods of minimizing the danger from anaphylactic shock during serum treatment. The author carefully reviews the observations of Schick on the recognition through allergic skin reactions of individuals whose blood normally contains diphtheria antitoxin in quantities sufficient for protection. The possibilities of better results in the serum treatment of tetanus through an improved technic is dwelt upon, and the potentialities of vaccine treatment in Hodgkin's disease are suggested. Minute attention is given immunity in various diseases; to the preparation of autogenous and other

vaccines; to methods of immunization, and to the technic of immunization tests.

The plates are perfect in color and conformation and are selected and placed with discrimination. The author's delightful style and successful avoidance of obscure technicalities adds to the interest of a fascinating study.

Simon's work offers the student a condensed yet adequately complete manual, in a subject whose literature is voluminous, with full attention to laboratory technic. It is, moreover, a safe guide in more extended investigations. To the practitioner it affords that grasp of principles and methods which will enable him fully to avail himself of the aids that the modern laboratory places at his disposal in the diagnosis, control and treatment of disease.

MATERIA MEDICA AND THERAPEUTICS. A Textbook for Nurses. By Linette A. Parker, B.Sc., R.N., Instructor in Nursing and Health, Teachers College, Columbia University. 12mo, 311 pages, illustrated with 29 engravings and three plates. Cloth, \$1.75 net. Lea & Febiger, publishers, Philadelphia and New York, 1915.

Essential facts only are presented, and details that might confuse the mind of the student are avoided. The nurse learns from this volume not only that certain drugs are administered in certain conditions, but the reasons for their selection. Recognizing the nurses' viewpoint, the author places emphasis not on the fact that a certain drug is prescribed in a certain condition, but on what action the drug ordered by a doctor may be expected to have, what untoward effects may be looked for, and the emergency procedure pending the physician's arrival in case of an overdose.

In the preliminary sections tables, technic and the necessary definitions are clearly stated and explained. The consideration of drugs is logically arranged by systems—nervous, muscular, circulatory, etc.—with an additional section devoted to specifics and drugs which affect nutrition. A concise chapter on legislation concerning poisons and

habit-forming drugs includes consideration of the Harrison law, indicates just which drugs are restricted and how to conform to the law. In the chapters on Psycho, Hydro, Electro, Serum and Ray Therapy a clear insight is given into a department of scientific medicine, access to which has heretofore been had only through the most technical or medical treatises.

The illustrations are at once striking, appropriate and illuminative. The author's easy style, faculty of clear expression and ability to absorb the interest of the reader add to the usefulness of a book in which the scope and purpose indicated by the title are never departed from.

DISEASES OF THE DIGESTIVE ORGANS, WITH SPECIAL REFERENCE TO THEIR DIAGNOSIS AND TREATMENT. By Charles D. Aaron, Sc.D., M.D., Professor of Gastroenterology in the Detroit College of Medicine and Surgery; Consulting Gastroenterologist to Harper Hospital, Detroit. Octavo, 780 pages, with 154 engravings, 48 roentgenograms, and eight colored plates. Cloth, \$6 net. Lea & Febiger, publishers, Philadelphia and New York.

Dr. Aaron has made available in this volume all that modern research and improved facilities for observation have added to the store of useful knowledge in this field; eliminating all abstract theories, and presenting only the practical, proven and helpful.

The diagnosis and treatment of digestive diseases are fully set forth, and to give clearness to the handling of the subject the material and conclusions are presented in conformity with the physiologic path of the digestive tract, beginning with diseases of the mouth, and proceeding to the consideration of the pharaynx, esophagus, stomach, liver, gall-bladder, bile ducts, pancreas, small intestine, vermiform appendix, colon, sigmoid flexure, rectum and anus.

Dietetic treatment; the use of Roentgen rays; hydrotherapeutic measures; the functions of the liver and pancreas in metabolism; duodenal feeding in gastric and duodenal ulcer; the indications for surgical intervention in diseases of the rectum and anus; the presence of animal parasites in the intestines; the various tests of functional efficiency and oral sepsis as a factor in the etiology of gastro-intestinal diseases are dealt with fully. The book is equally useful as a working manual in the hands of the specialist and as a convenient reference volume for the practitioner or surgeon.

## Editorial.

#### PREVENTION OF TYPHOID FEVER.

The very able committee of the Nashville Academy of Medicine have issued a very strong, authoritative and important appeal in regard to this very serious pathological condition, which at this time, being so apropos, we take great pleasure in presenting to our readers in part, as follows:

"During the past year the city of Nashville and the county of Davidson had a large number of cases of typhoid fever; a number far in excess of what should be expected in a community so well situated from a hygienic standpoint.

"The disease is most pravalent in the summer months. As this season approaches, the Nashville Academy of Medicine and Davidson County Medical Society, through the undersigned committee, acting in conjunction with the city health officer, wishes to inform the citizens of this community of the method of preventing this dread disease, to the end that the number of cases of typhoid fever be materially lessened.

"It is an established scientific fact that every case of typhoid fever that exists comes from some pre-existing case of the disease. Expressed differently, every case of typhoid fever means that the affected person has taken into his or her mouth through water, milk or other food, some of the excretions of a person suffering from the same disease. This is an abhorrent fact, but nevertheless literally true. With this knowledge, the control of the disease should be easy, but the various methods by which food and drink may become contaminated complicates the matter to no little degree.

"The water furnished the citizens by the municipal water plant cannot be considered as a possible source of typhoid fever. Repeated tests by the city and state bacteriologists of water taken from the pipes of the city have shown that there are no disease-producing germs in the city water. However, water is a potent factor in the production of typhoid fever in Nashville, but it is from the private well, spring or cistern. To eliminate water as a causative factor in typhoid, boil all your water, and under no circumstance drink water from any well, spring or cistern; remembering that the clearness of water is no criterion of its purity. The mineral constituents of water in no way tend to destroy the germs that may be present, so that mineral waters, e. g. sulphur water, lithia water, etc., are not necessarily pure waters from a bacteriological standpoint.

"Milk becomes contaminated very largely through impure water. The daily chemical and bacteriological examinations of the milk brought into the city by the city bacteriologist safeguards the public in this respect. The publicity campaign against the fly has been thorough, and it is only necessary here to mention this pest as the disseminator of typhoid and other diseases. The presence in a community of a so-called "carrier"—that is, a person who is enjoying perfect health apparently, but harbors in his system large numbers of typhoid germs, and who is capable of contaminating the food or drink of a household or community, thereby causing the disease—is of the greatest menace because of the difficulty of detection.

"The above-mentioned facts are but a few of the problems that confront every person in this community if they are to avoid typhoid fever. It is our desire to urge the observance of these rules, for after all they are the rules of cleanliness, but we wish to more strongly urge that every citizen who has not had typhoid fever previously to submit to anti-typhoid inoculation. This is a perfectly harmless procedure and is as simple as it is efficient. This consists of the injection, at weekly intervals for three or four weeks, of a vaccine, at the end of which time it can be safely said that the person so treated will not have typhoid fever. There is no danger from this procedure and it will not prevent one from continuing the pursuit of one's daily work. This inoculation can be carried on by any physician, and for those who cannot procure the vaccine by other means the city board of health is prepared to furnish this free on application. The poor need feel no hesitancy in going to the city health officer for the vaccine, for he will be more than glad to furnish this free of all cost. This anti-typhoid vaccination is not an experiment, for its efficiency has been amply proven in the United States army, as well as in the armies of Europe and in civil communities in this country. We cannot too strongly urge every person to avail themselves of this almost certain preventative of this dread disease.

"As pointed out above, every case of typhoid fever results from some other case of the disease. The necessity, therefore, of disinfecting the discharges from a typhoid patient is evident. sponsibility rests upon the one who is nursing the patient. board of health is prepared to furnish the household of all cases of typhoid fever sufficient crude carbolic acid to effect this; also, a nurse will be supplied to give instructions as to the proper method of doing The typhoid situation in Nashville and Davidson County is a serious problem. You may be the next victim, so it behooves you not to treat the matter lightly. The Nashville Academy of Medicine and the city and county boards of health are doing everything possible to curtail the disease, but without the co-operation of the people, no great amount of good can be done. Hygiene is personal, and the responsibility is on the individual. This is an appeal to you to adopt sanitary methods of living and to avail yourself of scientific procedures for the prevention of a disease that you may contract and which may cost you your life—and which is entirely preventable.

"J. A. WITHERSPOON, M.D., Chairman. "J. F. GALLAGHER, M.D., Secretary."

#### PELLAGRA.

In response to an urgent request from Dr. R. Q. Lillard, secretary of the state board of health, the U. S. Public Health Service sent to Nashville Dr. Joseph Goldberger, who has charge of the government's pellagra investigations, for a conference relative to the pellagra situation in this state.

A conference was held Monday morning, May 17, in the office of the state board of health, in which Drs. Lillard, H. H. Shoulders, B. G. Tucker, Olin West and W. E. Hibbett took part. Later, Drs. Lillard and Tucker took Dr. Goldberger to the isolation hospital to see the pellagra cases that are being treated there by Dr. Tucker. Dr. Goldberger expressed himself as highly pleased with Dr. Tucker's success and congratulated him as being the first to follow the lead of the Public Health Service in demonstrating that pellagra is curable by proper feeding.

As a result of the conference it was agreed that the first thing to do to successfully deal with the disease, which is attacking a great many people, is to inform the public of the latest advances made by the U. S. health bureau in its studies of the disease. These studies demonstrate that pellagra is neither infectious nor contagious, as so many people, including doctors, have heretofore feared. It is not a communicable disease.

The investigations of the government's health experts prove that pellagra is due to eating faulty, one-sided, monotonous diet—a diet, for example, which contains too much cereal, starchy food, syrup or

molasses and canned goods, and not enough of such foods as fresh milk, eggs, lean meat and beans or peas.

According to these health experts, the disease can be cured as Dr. Tucker is curing them, by giving people the right kind of food, and that it can be prevented in the same way—that is, by proper food.

In this campaign of education the U. S. Public Health Service will co-operate with Dr. Lillard to the full extent of its power.

Dr. Goldberger also urges that the doctors be invited to the hospital to see for themselves how Dr. Tucker is treating and curing pellagra, for he thinks that but few know anything about this new method of exclusive diet treatment.

#### AN ESTIMATE AS TO DRUG ADDICTS.

Since the passage of the Harrison narcotic law numerous statements have appeared in newspapers and medical journals regarding the number of drug addicts in the United States. Most of these statements are mere guessss, no accurate data existing on which to base any careful estimates. Certainly the maximum figures given by some writers are greatly exaggerated. In a recent issue of the Scientific American, Lucius P. Brown, food and drug commissioner of the State of Tennessee, furnishes data on which to base a more or less accurate estimate. From figures derived from the operation of the food and drug laws of Tennessee, Commissioner Brown estimates that there are approximately 5,000 drug addicts in this state. As Tennessee comprises about 21-3 per cent of the entire population of the country, this would indicate that there are about 225,000 drug addicts in the United States. "But," says Mr. Brown, "Tennessee being an agricultural state and, therefore, decidedly more free from such addicts that those states where the pressure of modern life is harder, we should add 10 per cent at least to this number on the assumption that the drug addicts throughout the country will average 10 per cent higher than in Tennessee, giving in round numbers 247,000 drug victims for the entire country." On these figures he concludes that 250,000 is a maximum estimate, and that the addicts annually use about \$6,500,000 worth of drugs unnecessarily. figures, as Mr. Brown says, are bad enough, but they are very different from the two or two and one-half million drug addicts which have been claimed by some sensational writers. This estimate quoted by the Journal of the American Medical Association is interesting, though, being based on figures from a single state, it must be regarded as only an approximation.

In a later statement Mr. Brown says that figures prepared in his office show that even a smaller proportion of the colored race in Ten-

nessee are addicted to the use of drugs. In explanation, he says these conditions are due in part to the fact that the average negro avoids as far as possible any contact with an official, and to the further fact that the negro appears to use relatively less morphine and more cocaine than the white man.

# BANQUET IN HONOR OF DR. C. H. TODD, OF OWENS-BORO, KY.

We desire to acknowledge with sincere thanks an invitation to attend a banquet to be given by the physicians of Owensboro and vicinity on the evening of June 16th inst., in honor of Dr. Chas. H. Todd, of that city. We most heartily commend this recognition of his long and faithful services by his professional colleagues.

Dr. Todd was born in Shelby County, Ky., in 1838; graduated from Tulane University in the early spring of 1861, and was immediately appointed assistant physician of the Louisiana State Insane Hospital, serving in that capacity until November 2, 1861, when he was commissioned assistant surgeon in the Confederate States army and was assigned to field hospital duty until December, 1862, when he was transferred to the 6th Louisiana regiment; promoted to surgeon of that regiment about one year later, and serving with it until June, 1864, when he was transferred to the 16th Virginia regiment, remaining with it until Lee's surrender at Appomattox C. H.

At the close of the war between the states he located at Owensboro, where he has since resided and has been actively engaged in the practice of medicine. He was elected First Vice-President of the Kentucky State Medical Association in 1876, and President in 1878, being the oldest ex-President of his state association now living. A member of the Owensboro Medical Society, he served as its Secretary from 1868 to 1884, as President from 1888 to 1905; Secretary of the Daviess County Board of Health from 1892 to 1904, and its President in 1905.

Kindly, courteous and genial, faithful in the discharge of every duty, ripe in years, rich in honors, may he yet "live long and prosper."

THAT "TIRED FEELING":—The reason many persons complain of that "tired" feeling is to be found in a deficiency of blood elements. With the blood-stream thin the tissues do not receive a normal supply of nourishment and muscular energy is quickly dissipated—wherefore the tired condition. It is in just such a state that the nourishing properties of Cord. Ext. Ol. Morrhuae Comp. (Hagee) exert their maximum effects. It furnishes nutriment to the tissues, and that is the prime need in honestly tired people.

# EXAMINING BOARD FOR APPLICANTS TO PRACTICE MEDICINE IN TENNESSEE.

The examining board, as created by the recent act of the Legislature, House Bill No. 726, published in our May issue, is composed of the following members. After the expiration of their respective terms of office, the terms of their successors will be for six years:

Irby Hudson of Nashville, six-year term.

- J. W. S. Rhea of Memphis, two-year term.
- C. C. English of Bristol, four-year term.

Mr. Hudson is a well-known young educator of Nashville. He is an instructor at the Hume-Fogg High School, and a former Vanderbilt man. Professors Rhea and English are also prominent educators of their respective cities.

SEND FOR THE SOAP:—Physicians who receive that interesting little journal, Therapeutic Notes, published bimonthly by Parke, Davis & Co., will find in the current issue a post card authorizing the recipient to send for a free cake of Germicidal Soap, P. D. & Co. The writer of this paragraph hopes there will be a general acceptance of the invitation. Take advantage of the offer—send in the card—for Germicidal Soap, P. D. & Co., is no ordinary soap, no ordinary germicide.

Germicidal Soap, P. D. & Co., the body of which is prepared from pure vegetable oils, is at least five times stronger than bichloride of mercury in germicidal power. On test a one per cent solution (1:5000 mercuric iodide) has been found to destroy pus-producing microorganisms in less than five minutes, whereas a solution of mercuric chloride of the same strength required from fifteen to sixty minutes to accomplish the same result.

When neutral soaps are dissolved in water they are gradually decomposed, liberating free alkali. In the case of Germicidal Soap, P. D. & Co., the free alkali, in proper amount, increases the germ-killing power of the mercuric salt very greatly, because it prevents coagulation of albumen, and allows intimate contact of the germicide with the infected tissues. This soap does not attack steel or nickeled instruments or utensils, as many antiseptics do.

Germicidal Soap, P. D. & Co., is useful for sterilizing hands, instruments, and site of operation; also for lubricating sounds, specula, etc. It serves well as a disinfectant wash after attendance upon communicable diseases, also in certain surface lesions attended with fetid discharge and skin infections of parasitic origin.

Many physicians direct the use of Germicidal Soap, P. D. & Co., for cleansing minor wounds, as a deodorant in hyperidrosis with

offensive odor, for cleansing the scalp and checking dandruff, for treating pustular acne and furuncles, for the preparation of vaginal douches, and for ridding household pets of fleas and lice.

EXAMINATION FOR ADMISSION TO THE UNITED STATES PUBLIC HEALTH SERVICE.—Boards of commissioned medical officers will be convened to meet at the Bureau of Public Health Service, Washington, D. C., and at the Marine Hospitals of Boston, New York, Chicago, St. Louis, Louisville, New Orleans, and San Francisco on Monday, June 21, 1915, for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health Service. Candidates must be between 23 and 32 years of age, graduates of a reputable medical college, and must furnish testimonials from two responsible persons as to their professional and moral character. Candidates must have had one year's hospital experience or two years' professional work. Candidates also must be not less than 5 ft., 4 in., nor more than 6 ft., 2 in., in height, with relatively corresponding weights. The examinations are: (1) Physical, (2) Oral, (3) Written, and (4) Clinical. Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order. They will receive early appointments. After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon. Assistant surgeons receive \$2,000, passed assistant surgeons \$2,400, surgeons \$3,000, senior surgeons \$3,500, and assistant surgeon generals, \$4,000 a year. quarters are not provided, commutation at the rate of \$30, \$40, and \$50 a month, according to the grade, is allowed. All grades receive longevity pay, 10 per cent. in addition to the regular salary for every five years up to 40 per cent. after twenty years' service. The tenure of office is permanent. For invitation to appear before the Board of Examiners, one may address: "Surgeon-General, Public Health Service, Washington, D. C."

Examination for Admission to the Medical Corps, U. S. Navy.—The next examination will take place on or about July 6, 1915. Applications, accompanied by the necessary letters or certificates, should reach the Bureau of Medicine and Surgery, Navy Department, Washington, D. C., not later than June 26, 1915. A candidate for appointment in the Medical Corps of the Navy must be a citizen of the United States, between 21 and 30 years of age, and a graduate of a reputable school of Medicine. The application must be in the handwriting of the applicant, and must be accompanied by the following certificates:

(a) Letters or certificates from two or more persons of good repute,

testifying from personal knowledge to good habits and moral character. (b) A certificate to the effect that the applicant is a citizen of the United States. (c) Certificate of preliminary education: The candidate must submit a certificate of graduation from an accepted high school or an acceptable equivalent. (d) Certificate of medical education: This certificate should give the name of the school and the date of graduation. (e) If the candidate has had hospital service or special educational or professional advantages, certificates to this effect, signed by the proper authorities, should also be forwarded. The applicant will save unnecessary correspondence if he will make sure when submitting his application that the qualifications enumerated above are clearly and plainly described in his letters or certificates.

THE TUBERCULOUS INVALID:-The pricking of the Friedmann bubble but served to still further confirm and accentuate the vital importance of the well defined methods of treatment for tuberculosis. that have given such encouraging results, i.e., fresh air, sunshine, rest, nutritive reinforcement and judicious medication. A proper combination of these four remedial factors is practically certain to place the incipient tuberculosis invalid upon the road to recovery, if the patient is intelligently handled and the treatment persisted in. While it is, of course, acknowledged that the first three non-medicinal agents referred to constitute the vital elements of the upbuilding regime, considerable aid is afforded by judicious medication. Hematinic reinforcement should certainly not be neglected in view of the secondary anemia which is almost always apparent. Among the agents which have produced the best results in the revitalization of the blood, Pepto-Mangan (Gude) is the most generally eligible and acceptable. As it is thoroughly palatable, neutral in reaction, free from irritant properties and devoid of constipating effect, the digestion of the patient is not disturbed, while the appetite and general vital tone improve more rapidly and satisfactorily than when hygiene and nutritive measures are depended upon exclusively.

HYGIENE OF PREGNANCY:—To relieve many of the distressing symptoms of pregnancy within limits of the healthy progress of gestation, Phillips' Milk of Magnesia may be used with great advantage. When taken inwardly, its antacid property gives immediate relief to heartburn, its sedative action upon the stomach, controls "morning sickness" and often overcomes protracted cases of nausea and vomiting. As constipation invariably aggravates existing stomach discomfort, the mild, yet efficacious, laxative action of this preparation will assure regular movements from the bowels.

The sensitivity and rapid decay of teeth in pregnant women are not due, as generally supposed, to a lack of lime salts in the blood, but to the eroding action of acid saliva and acid vomitus upon the enamel of the teeth. The use of Phillips' Milk of Magnesia, as a mouth wash, will neutralize any acidity of the mouth, relieve this sensitiveness of the teeth, and prevent that roughening and softening of the enamel (induced by acids) which invite growth of germs of decay.

IT IS DURING THE SPRING AND SUMMER MONTHS more particularly that the physician is called upon to treat patients, who though not ill enough to be in bed, are not at all well. The symptoms are very much like those experienced in malaria but the causes are entirely different and a different treatment is necessary.

This condition arises from the fact that in the spring the eliminative functions do not present their usual activity owing to the torpor and locked-up secretions which have existed during the winter months, when the skin neglects its duties and the kidneys are overworked.

In such cases the use of Tongaline, either liquid or in one of its tablet forms, will be attended with most beneficial results, by promoting the absorptive powers of the various glands which have been clogged and by its stimulating action upon the liver, the bowels, the kidneys and the skin.

THE BOWELS ARE SECRETORY ORGANS:—It is the failure of the secretory function of the bowel, together with a poor bile secretion, which, in nine cases out of ten, is responsible for constipation.

Most cathartics altogether overlook this factor and address themselves solely to a stimulation of the musculature. Some even inhibit intestinal secretion. The result is a rapid, unsatisfactory bowel movement, followed by paralytic reaction.

Pil. Cascara Comp. Robins is a rational therapeutic formula, which promotes a natural flow of secretions, which is, in turn, the physiologic stimulant of peristalsis. Thus a normal evacuation is produced, without subsequent inhibition.

VIBURNUM IN CRAMPS OF CHOLERA MORBUS:—Hayden's Viburnum Compound presents Viburnum Opulus and Dioscorea Villosa in their most refined and active state and when given in hot water, it will be found as useful in the cramps of cholera morbus as it is in dysmenorrhea. This excellent antispasmodic well deserves a trial in all conditions of cramps, anywhere in the body.

SOPORIFIC POWER WITHOUT EVIL EFFECT:—Inasmuch as all too many excellent soporific agents unfortunately produce evil effects in connection with their tranquilizing influence, the exceptional value of one which is free from bad qualities will be readily appreciated by all practitioners. It is this appreciation of therapeutic merit which has brought *Pasadyne* (Daniel) into such wide use in relief of sleeplessness, nervous irritability and even pain. As is well known, *Pasadyne* is the Concentrated Tincture of Passiflora Incarnata, the advantages of which have been known by a large part of the profession for many years. By employing *Pasadyne* (Daniel) one may secure full soporific power without distressing after-effects. It has no concern with the Harrison act.

Samples supplied the medical profession if request is mailed to the Laboratory of John B. Daniel, Atlanta, Ga.

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

THE AMERICAN PROCTOLOGIC SOCIETY will hold its seventeenth annual meeting in San Francisco, Cal., June 21-25, inst., with head-quarters at the St. Francis Hotel, and place of meeting in the Civic Auditorium.

The officers are: L. J. Krouse, M.D., Cincinnati, O., President; C. F. Martin, M.D., Philadelphia, Vice-President, and Alfred J. Zobel, M.D., 518-520 Shreve Building, San Francisco, Cal., Secretary-Treasurer.

Fifteen excellent papers are on the preliminary program, by prominent and leading specialists in proctology.

All members of the medical profession are cordially invited to attend all the sessions.

BROMIDIA AND THE HARRISON ACT:—Inasmuch as Bromidia (Battle) has no opiate content whatever, it is not necessary to make use of the conditions of the Harrison act in prescribing it. In using Bromidia (Battle) the physicians can order it just as he always has done. In this connection, we may add that by means of Bromidia (Battle) the physician is enabled to secure a well balanced and carefully compounded bromide preparation, possessing marked advantages over extemporaneously prepared.

\$0ME PER\$ONAL \$UGGE\$TION\$:—There i\$ a \$mall matter that \$ome of our \$ub\$criber\$ have \$eemingly overlooked. It i\$ almo\$t needle\$\$ to \$ugge\$t to tho\$e intere\$ted that we refer to the \$ub\$cription price of thi\$ journal. A \$tatement of date of expiration of \$ub\$cription i\$ on the mailing wrapper of each number, and an additional \$tatement enclo\$ed in all copie\$ \$ent to tho\$e in arrear\$. "Verbum \$apientia \$ufficit!"

## Selections

EARLY DIAGNOSIS OF PARESIS:—The early diagnosis of paresis is not only of great importance, but having made the diagnosis, one may be placed in a most difficult and responsible position in giving advice about this class of patients. It is frequently most difficult to convince their relatives of the lack of responsibility and danger of paretics to the community.

Most men now believe paresis to be primarily caused by lues. Whether the nervous systems of some individuals are more susceptible to syphilitic virus and thus more likely to develop paresis, or whether definite strains of spirochetae exist which cause paresis are very interesting and confusing problems. The spirochetae have been found by a number of observers in a high percentage of living brain tissue examined in paretics—the method being by way of the orbit and optic fissure and the finding of spirochetae in paretic brains at necropsy has quite often been reported.

In favor of the possibility of a certain type of spirochetae

causing the disease are the reports of numbers of individuals being infected from the same source and developing paresis. Moerchen reports infection of eleven army officers from one girl with later development of paresis in all and all but one of them having died of the disease. Similarly he reports infection of several men by the same woman with tabo-paresis developing in all.

It is well known that conjugal paresis usually occurs without any knowledge of earlier infection, or at least an infection of the very mildest type.

Just how far other factors enter into the etiology is difficult to say. Alcohol has been given a leading role by many, but it must not be forgotten that alcoholism may be and often is an early symptom of paresis rather than a contributory cause. A paralytic is usually very susceptible to small amounts of alcohol.

There is a tendency to expect to find in paretics only the well-known and usually described mental complex—the ideas of grandeur, of wealth and of strength, whereas the atypical forms of onset so necessary of recognition are overlooked.

Often the first appearance is as an acute mania, and it is an acute mania, some of the most violently maniacal patients being paretics. This type of patient may have previously shown signs common to other manias, such as an unusual amount of misdirected energy and restlessness.

Again, paretics may resemble cases of melancholia and may even attempt suicide, though this is rare. These depressed and hypochordriacal forms are becoming relatively more frequent.

Neurasthenia is a diagnosis frequently made in early cases, which later has to be changed to one of paresis, and one should be particularly cautious in diagnosing neurasthenia with a syphilitic history, either given or suspected.

Attacks of epilepsy occurring first in middle life and transient aphasias lasting a few minutes to an hour or

more are very suggestive of beginning paresis; so also are temporary attacks of blindness and hemiplegia.

Sometimes the mental state may resemble that of paranoia and the delusions of persecution may be surprisingly well systematized.

Hallucinations, though not common, do occur. They are particularly frequent in the negro race, where they are often of the mystic type.

In all these cases, even the atypical ones alluded to, you will find, upon careful questioning, that the relatives or friends have previously noticed some mental peculiarities in the patient. A person formerly moral and just may have become crabbed, irascible and irritable, former neatness changed to carelessness, etc.

Increase in the sexual desire, at times with perversion, is a most dangerous symptom. Forgetfulness and over-excitability are probably the most frequently observed and most annoying of the early manifestations. Indeed, it would be useless and tedious to consider in detail the numberless little peculiarities and mental vagaries occurring in the early course of this disease. They are all simply signs of the same mental deterioration and are mentioned only to show the possibilities of errors in diagnosis and to emphasize the point that paresis cannot always be surely diagnosed from the mental symptoms alone, and one should never neglect making a careful search for the physical signs of the disease.

Among the physical signs of paresis probably the earliest and the most constant is the Argyl-Robertson pupil. It may occur unilaterally or bilaterally and in the earliest stage, the pupil may be only sluggish in the reaction or the absence of the consensual reflex may be the only sign of pupillary involvement. Irregularities in contour are common, also inequality of the pupils.

Primary optic atrophy is a much more frequent occurrence in early paresis than is commonly supposed and no doubt would be found even more often if the eye grounds were routinely examined. Owing to the fact that in paresis this atrophy very seldom advances sufficiently to seriously involve vision, attention is not called to the eye grounds and the presence of atrophy is overlooked. In tabes, on the contrary, the condition usually passes into one of total blindness.

Headache is a common symptom and may readily be confused with a neurasthenic type.

The speech of the paretic is too well known to need much description; syllables are often missed or jumbled and the labials and linguals are poorly pronounced. The peculiarly slanted, tremulous writing in which syllables and words are misused or omitted is characteristic of the disease, and such mistakes are sometimes the first to call the relatives' or friends' attention to the patient's condition.

There are tremors of the tongue and facial muscles, particularly of the lower part of the face, as contrasted to the involvement usually of the upper part in alcoholism. Cases of alcoholism may show a speech defect, tremor, sluggish and wide pupils and mental deterioration, making a differentiation from early general paralysis most difficult.

The deep reflexes in paresis may be lost or diminished or abnormally active. Cases beginning as tabes dorsalis, with lost knee jerks, may later have the knee jerks becoming very active.

The value of the laboratory tests and analyses of the blood and spinal fluid is, of course, of great importance, not only for diagnostic purposes, but as a guide during the course of treatment.—Edward M. Williams, M.D., in St. Paul Med. Jour.

COMPOUND TINCTURE OF BENZOIN (friar's balsam) will form a protective film on mucous membranes and moist surfaces, just as collodion does on the dry skin. It is useful in coating fissures and protecting other wounds of the mouth or anus.—Am. Jour. of Surgery.

A CASE OF MYDRIASIS FROM THE SEED OF THE JAMES-TOWN WEED:—Two gentlemen were hunting in the fields of Eastern Virginia; the one who happened to be in front kicked a small shrub with his foot. The rear one felt something fly into his right eye, but it gave him no further concern for several hours. Later, on board the train, he noticed an irritation in that eye, and observed that his pupil was dilated. On inspection, his wife skilfully removed from the lower lid what appeared to be two dark seeds stuck together. The following day, his pupil being no better and his sight being blurred, he came to consult me about his pupil and his vision.

As soon as he had related the facts of the case. I suspected from my acquaintance with the flora of the region where he had been hunting, my own native heath, that he had been poisoned by the seeds of the Jamestown weed. I requested him to write to his friend in Virginia, asking him to go to the fields through which he was walking, pluck and send me, if possible, a sprig of the shrub which he had kicked. In a few days my patient brought me several leafless dried stems of a shrub having prickly pods. I immediately recognized the specimen as the pods of the Jamestown weed, or datura stramonium. The moisture and heat of the eye doubtless softened the cortex and the alkaloid produced this effect. On biting into one of the seeds, I noticed the characteristic taste of the Jamestown weed. with which I was acquainted from my boyhood. Not content with my own recognition of the plant. I took it to the College of Pharmacy, in this city, where Dr. Ballard, the botanist, likewise recognized it as datura stramonium and gave me some information concerning its habitat in this country. It grows from Nova Scotia to the Gulf, in California, Texas and Mexico, as datura stramonium, ataula, fastuosa and metel, the most usual form being the one concerned in this case. The further south it grows, the stronger the percentage of alkaloid contained. This plant belongs

to the same order as the belladonna, or deadly night-shade, the solonaceae, all of which have the physiological effect of dilating the pupil, either when directly introduced into the eye or into the general system in sufficient doses to produce its physiological effect.

I have often come in contact with this plant when I was a boy, but never knew a case of poisoning from it, and I have never heard of one proceeding from the seeds. leaves likewise contain the active principle, and a case which was narrated to me personally by Dr. Holtzclaw, of Chattanooga, Tenn., establishes this fact. In 1898, when my regiment was stationed near Chattanooga. Dr. Holtzclaw told me of the case of a gentleman in his private practice who awoke one morning with a widely dilated pupil and inability to see objects nearby. It was his right eye. He consulted a number of physicians in the city without any satisfactory explanation and naturally was much alarmed. He finally fell into the hands of Dr. Holtzclaw, who cross-questioned him concerning every act committed during the antecedent two or three days; finally, the patient admitted taking a walk through the fields the day before, which was Sunday. Dr. Holzclaw asked if by any chance he had touched any shrub. He remembered pushing aside a bush which was in his way with his right hand and tearing off a few leaves of it at the same time. Dr. Holtzclaw requested him to go with him to the place, and, on finding the identical bush, he recognized it as the Jamestown weed. I am rather inclined to think that if I had not known of this case I might have missed the diagnosis in mine.

A suddenly dilated pupil from no obvious reason is an alarming symptom even to the experienced in medicine. To the laity, it is naturally mysterious. It suggests to the experienced, third nerve paralysis, glaucoma, or beginning general paresis. It is important always that the cause of the dilation be thoroughly investigated, not only for scientific accuracy, but for the peace of the mind of the indi-

vidual who is affected. My patient was an educated and intelligent man who, though not greatly alarmed at the symptoms, was very much relieved mentally by the quick diagnosis. As a certain Latin author says, "Fortunate is he who can recognize the causes of things."—J. Herbert Claiborne, M.D., in Va. Medical Semi-Monthly.

MEAT EATING AND APPENDICITIS:—In the immense literature on appendicitis comparatively little is to be found on the subject of its etiology, and even this is largely based on theory rather than definitely established facts. Essentially the disease is to be considered as an infection of a rudimentary organ ill equipped by reason of its anatomical peculiarities to resist the inroads of bacteria. The narrow lumen of the appendix, its scanty muscular coat, and the displacement and distortions to which it is frequently subjected by intestinal bands and adhesions favor the stagnation of secretions and fecal matter in its interior, and thus establish conditions predisposing to infection and inflammation. While the bacillus coli seems to be the chief offender various other bacteria, such as the influenza and typhoid bacillus, the pneumococcus and the pus germs, may be concerned in the causation of appendicitis. Bearing in mind that the disease is of microbial origin, and particularly due to the bacillus coli, how can its undoubted increase be best explained? For even after making due allowance for the greater number of cases that are nowadays recognized owing to greater accuracy in diagnosis, the fact remains that appendicitis is of more frequent occurrence than in former years, and particularly in the larger cities. In seeking for an explanation it is reasonable to assume that the prevalence of the disease must be due to some factor which increases bacterial activity in the intestinal canal, and there is nothing which exerts so profound an influence in this respect as diet. But, it will be asked, has there been any change in the dietary during recent years

sufficient to act as a predisposing cause of appendiceal in-According to D. P. D. Wilkie (British Medical Journal), the increased consumption of meat among the English working class, due to the rise in wages, is responsible for the greater frequency of appendicitis, and especially the severe form, in large industrial areas. The same observation has been made in Germany, and it has also been noted that the disease is relatively much more frequently met with among town dwellers than among the peasant class. Wilkie further calls attention to the comparative rarity of acute and fatal cases of appendicitis among Eastern peoples, who subsist largely on a vegetarian diet, such as the Roumanian peasants and the Turks. His own experiments on animals afford strong corroborative evidence of the correctness of his views. Thus he found that if the appendix was artificially obstructed so as to be partially filled with fecal matter, changes of a gangrenous putrefactive type were far more apt to follow in protein-fed than in carbohydrate-fed animals, and practically the same result has been obtained by Heile. Wilkie believes that similar changes take place in the human appendix as the result of obstruction with fecal matter consisting largely of proteids, and he therefore considers the urgent gangrenous type of acute appendicitis to be of the nature of acute appendicular obstruction and as a disease of meateating nations.

If we accept these conclusions it is not difficult to understand why appendicitis is so common in our own country where the people indulge so greatly in a meat diet. There is no doubt that animal foods are more prone to give rise to digestive disturbances and putrefactive processes in the intestines than those of a vegetable nature, and that such conditions constitute important predisposing causes of appendicitis. Let us therefore give serious consideration to Wilkie's suggestion, that "in a bulky and mainly vegetable diet lives the chief safeguard against acute appendicular

disease in its most severe and dangerous forms."—International Journal of Surgery.

SHOULD A NEW-BORN INFANT RECEIVE ANYTHING DURING THE FIRST TWO OR THREE DAYS?—Herrman, in the New York Medical Journal of January 9, 1915, opposes the view that new-born babies that receive nothing show no signs of injury. To a certain extent the writer thinks this may be compared to feeding in typhoid fever. Even with the method of partial starvation a large percentage of patients recover, but all who have employed the method of more liberal feeding will agree that the patients have complications no more frequently, are better able to resist complications when all other methods have failed, and when employed it must not be done indiscriminately.

WHEN DECAPSULATION OF THE KIDNEY SHOULD BE RESORTED TO:—1. In toxic nephritic following acute poisoning by mercury or carbolic acid.

- 2. In nephritis following infection, especially the acute infectious diseases, such as scarlet fever, etc., where there is great edema, or in the presence of uremia; its use should be considered as soon as medical measures have been thoroughly tried without relief. This is true especially in young adults and children.
- 3. In severe hemorrhage complicating chronic nephritis, when the bleeding in practically limited to one side. In these cases a nephrotomy should be done to make sure of the exact cause of the hemorrhage.
- 4. It may be indicated for the relief of renal pain which sometimes occurs in the course of chronic nephritis.
- 5. It may be of value in uremia and anuria during the course of chronic nephritis, merely as an emergency measure.
- 6. In eclampsia, when the symptoms are due to faulty action of the kidney, and where improvement does not follow delivery of child.

7. Cases of movable kidney associated with albuminuric casts and hematuria, in which the urinary signs result from the trauma incident to the mobility, may be cured by decaysulation and fixation, but when coincident with chronic Bright's only temporary good is effected.—Therapeutic Gazette.

GASTRIC AND DUODENAL ULCER:-In an article on this subject Dr. Max Einhorn (Canad. Med. Assoc. Jour. February, 1915) states that while the treatment of peptic ulcers is generally a strictly medical one, their sequelæ may require surgical intervention, the indications for which may be formulated as follows: 1. Perforation requires immediate operation. 2. Recurrent profuse hemorrhages (hematemesis or melena or both) endangering the life of the patient require a prophylactic interval-operation. 3. Frequent small hemorrhages, not being influenced by rational treatment, leading to an appreciable degree of constant anemia. demand operative intervention. 4. Cases with constant continuous hypersecretion, accompanied by intercurrent ischochymia, not yielding to treatment, should likewise be operated. 5. Severe pains, not influenced to a considerable extent by a repeated course of rational medical treatment. form a strong indication for operative measures. 6. Strictures of the pylorus leading to ischochymia are greatly benefited by surgical intervention (gastro-enterostomy). Beginning benign stenosis of the pylorus can however, also be treated tentatively by stretching. 7. Ulcer accompanied by tumor-formation and suspected malignancy should likewise be operated.

GERMAN DIURETIC MIXTURE:—Infusion of digitalis, 5 ounces; tincture of strophanthus, 45 drops; citrated caffeine, 30 grains; solution of potassium acetate (40 per cent),  $12\frac{1}{2}$  drachms. The dose is one tablespoonful every two to four hours. Be sure to use only a freshly prepared infusion of digitalis.—Med. Council.

TREATMENT OF PUSTULAR BUBOES WITH SILVER-METHY-LENE BLUE: Saphier and v. Zumbusch (Deutsche med. Woch., No. 48, 1913) believe that treatment with silvermethylene blue offers the best results in pustular buboes. The part is shaved, cleaned with benzine and disinfected with tincture of iodin. A small incision is made in the middle of the postular gland and the pus aspirated. No anesthesia is required. Whatever contents of the gland cannot be drawn off by suction is squeezed out. The solution of silver-methylene blue is then injected into the cavity. does not matter whether the concentration is 1/2 per cent, 1 per cent, 2 or 5 per cent. A wet dressing is then applied and allowed to remain for at least 48 hours. Of 124 cases so treated by the authors, 10 per cent were cured within the first two days. The wound was closed and the inflammatory redness and pain had disappeared and not a drop of fluid could be aspirated or squeezed out; 20 per cent of the cases were cured in from 3-5 days, 30 per cent in from 6-8 days, 35 per cent in 14 days. In the remaining 5 per cent of the cases the results were not so good.

HYOSCYANUS, A NEGLECTED DRUG:—Hyoscin is largely used, yet hyoscyamus, from which it is derived, has sunk into unmerited obscurity. Nevertheless hyoscyamus is a valuable calmative and hypnotic which does not appreciably interfere with secretion and excretion. As a hypnotic and anodyne, while inferior to opium, it is often to be preferred because it relieves spasm and is in average doses free from danger.

When a cough sedative is needed, hyoscyamus lessens the irritability without arresting the secretions. In pain where arrest of secretion is disadvantageous, it, not hyoscin, is an admirable substitute for opium; and in a host of minor nervous affections of a spasmodic or painful nature it may be employed for limited periods without inducing habit.—

Med. Council.

THE TREATMENT OF TETANUS BY SERUM AND CHLORE-TONE:—The West London Medical Journal says that a prophylactic dose of tetanus antitoxin is now becoming the routine treatment in all cases of wounds where there is risk of dirt contamination, and in consequence the number of cases of tetanus at the front are said to be steadily diminishing. When, however, tetanus has supervened, chloretone has been found to be one of the most useful drugs for allaying muscular spasm and so giving time for the administration of serum and other surgical procedures. Chloretone has no effect on the toxin, nor will it break up the combination between the nerve centers and the toxin; it simply controls the muscular spasm.

It is best given as an enema: 60 gr. of chloretone dissolved in warm olive oil and repeated at such intervals as are indicated by an increase in muscular rigidity. After each injection a marked decrease in the trismus results, which makes it possible for the patient to take ample nourishment throughout the course of the disease.

The serum is given in doses of 100 Cc., repeated as often as necessary.—Charlotte Medical Journal.

THE RADIUM TREATMENT OF FIBROID TUMORS:—Howard A. Kelly, Baltimore (Surgery, Gynecology and Obstetrics, March, 1915), concludes that massive radium treatment of uncomplicated fibroid tumors stops the excessive flow and in younger women may regulate, without stopping it. It reduces the size of the growths, relieves pressure symptoms, and may even cause large tumors to disappear. If radium is tried and fails, operation can be undertaken without additional risk, which is not always the case, however, in cases of cancer of the cervix. Kelly believes that with increased experience and improved technic, most patients may be relieved of hemorrhage and that, roughly speaking, nine cases out of ten the tumor may be done away with without serious discomfort or risk.

INTRAVENOUS INJECTION OF DIPHTHERIA ANTITOXIN IN CHILDREN:—The American Journal of Diseases of Children for January, 1915, contains an article on this topic by Schorer. He says it is not to be inferred that intravenous injections are advocated in all cases, but intravenous injections undoubtedly produce results more rapidly and are to be preferred in late and severe cases.

Intravenous injection is less painful at the time of administration and later, and because of the smaller number of units necessary it is much less expensive. Entrance into the jugular vein in children is not difficult, and this vessel affords a ready site for the intravenous injection of diphtheria antitoxin when the median basilic and the cephalic veins are too small. This small series indicates that there are fewer carriers and heart failures are less likely to occur following intravenous injection, but there are more immediate and serum reactions. The immediate reactions never impressed the writer as being grave, and in themselves did not seem to be a contraindication to intravenous injection of diphtheria antitoxin.

TREATMENT OF CHRONIC PHLEBITIS:—Local alternate hot and cold submersions and spray are advised. Two tubs or pails are used, one containing cold water and the other water at 110° F. The affected limb is first submerged in the hot water for thirty seconds, then in the cold for fifteen seconds. This alternation is gone through ten times, ending with the cold water submersion. The part is then gently rubbed until the skin is dry and red, showing proper reaction. Gentle stroke massage in the direction of the venous flow is then to be carried out for ten minutes, the skin dusted with talcum powder, and an elastic support applied. The spray method (spraying with sponges of hot and cold water or a nozzle-spray attachment) applied for the same length of time is useful to treat the upper parts that cannot be submerged.—Monthly Cyclop. and Med. Bulletin.

A SIMPLE DIAGNOSTIC REACTION FOR MALIGNANT TU-MORS:—If the assertions made by M. P. Michailoff, of St. Petersburg, can be substantiated, we have in his method a wonderfully simple diagnostic test for cancer. Michailoff made the statement that the administration of potassium iodide per rectum (potassium iodide 4.0, sodium carbonate 2.0, and water 80 to 100 c.c.) is followed in one or two hours by an elevation of temperature if the case is one of carcinoma or sarcoma. In cases of syphilis the temperature was lowered. This reaction, he maintained, is analogous to the tuberculin test and equally specific. He further stated that by the administration of potassium iodide conjointly with hypodermic injections of one per cent of sodium arsenate in a 25 per cent solution of carbolic acid, he was able to "cure" several cases of cancer. appears that Dr. R. Robinson submitted, in 1913, before the Paris Academy of Medicine, a thesis on the diagnostic value of potassium iodide in cancer, the thesis having been accorded the Chevillon prize. Dr. Robinson is also of the opinion that the reaction following the administration of potassium iodide is analogous to the tuberculin reaction in tuberculosis. It seems that a method as simple as this could be easily verified and the statements of the originator either substantiated or disproved.—Editorial, N. Y. Med. Journal.

TREATMENT OF SWEATING FEET:—Dr. H. Althoff (Deut. Med. Woch.) says the feet should first be thoroughly washed with warm water and soap, rinsed, and dried. Then the soles and the skin between the toes are painted with equal parts of thirty-five per cent. formaldehyde and distilled water. The solution should dry before the foot is covered. In general this treatment should be repeated three days in succession. The effect is prompt and lasts for four to six weeks, when the application should be repeated. Sweating is often permanently cured.

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## Priginal Communications.

THE IMPERATIVENESS OF THE EARLY DIAGNOSIS OF CANCER.

BY WILLIAM D. HAGGARD, M.D., F.A.C.S.,

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There can be no more urgent reason for the consideration of the early diagnosis of cancer than the appalling fact that seventy-five thousand deaths occur from this dreaded disease in the United States each year.

It is startling to contemplate that one woman in every seven who dies after the age of thirty-five dies from cancer and one man in every nine, according to the report of the Imperial Cancer Research Fund. We are doing a tremendous amount of work in the prevention and cure of tuberculosis and yet it only causes 7% of the total deaths; whereas, cancer causes over 9%. Why are we not aroused to the acuteness of the situation?

Our profession is dispirited. This is the only disease we

treat that does not have a high percent of cure with, without, or in spite of our treatment. The mortality of this disease is 100%.

Primarily it is always local and theoretically it can always be cured by extensive and thorough destruction in the beginning.

Particularly this is the difficult and hitherto almost insuperable obstacle. If a single case of cancer has ever been cured, there is no reason why every other case under similar conditions could not be so controlled in its incipiency. Cancer is like a coal of fire, crudely speaking, that when it rolls down on the hearth rug can be stamped out at once and forever. If the fire is permitted to permeate the whole building, then, of course, it is impossible to put it out. The latter condition has been the unfortunate heritage of the medical profession. Our results have, therefore, been most forbidding. The laity have gotten the impression that it is a blood disease, that cutting makes it worse and that nobody is ever cured. This adds to our difficulty and we in turn by attempting to extend relief to delayed, advanced and border-line cases bring discredit upon the true possibilities of surgical therapy in this disease. If it were possible to decline every questionable risk on the ground it was delayed too long, people then might obtain the correct impression of the wisdom and the essentialness of seeking early relief. It has been computed the average time between the appearance of the first symptom of cancer and the first consultation is about eighteen months, and that the time elapsing from the first consultation and the surgical operation is about thirteen months. This is probably an over-statement, but serves to emphasize a well merited criticism. The Society for the Prevention and Control of Cancer is doing meritorious educative work for the public. It remains for our profession, pending some magical cure for this greatest of all scourges, to take stock of our dereliction and attempt to profit by the accumulated and disastrous experiences from delay.

It is very definitely established that whatever may be the cause of cancer local lesions are the invitation for it. almost never occurs without previous, long-continued, chronic irritation. This is particularly true on the surface of the body. For long the irritation of the dirt and soot has been known to cause so-called chimney-sweep cancer of the groin. Epithelioma of the skin never occurs without previous defect. Degeneration of moles, warts, and benign tumors are only too well known. Cancer of the tongue is nearly always on the site and exactly where the repeated trauma of a sharp tooth or snag impinges on the tongue. Cancer of the lip is nearly always in man and rarely ever in woman, because of the irritation of the pipe and the smokers burn. It is nearly always on the lower lip, the active one. The upper lip is passive. Cancer of the shin of the locomotive engineer from persistent heat has long been recognized. The danger from X-ray burns is cited.

Trauma has been very definitely ascertained by Coley to precede 23% of sarcoma examined by him and 32% of carcinoma.

The most frequent cancer sites in the body are the areas which receive the most irritation, trauma and punishment; the skin, the lip, the tongue, the female breast.

Of visceral cancer the parts of the organs involved are always the active parts, those subjected to the greatest strain. In the stomach it occurs nearer at the outlet; in the pyloric antrum; in the intestine it occurs seventeen times in the colon where the feces are hard, to once in the small intestine where the contents are liquid. The rectum is the most frequent site, save the stomach in which alone occurs one-third of the cases of cancer of the human body. The uterus is next most prone of all the organs to develop malignancy. It occurs fifteen times as often in the cervix as it does in the body. The former is notoriously subjected to irritation, inflammation and trauma. It rarely ever occurs in the nulliparous cervix.

The most striking examples of delay are curiously enough

on the parts of the body most accessible to inspection and examination. We must, therefore, look upon all abnormalities such as warts, moles, keratosis, chronic ulcers, etc., as potentially liable to malignant degeneration.

In cancer of the lip only one-fourth come for operation in the first six months. We should never let such an ulcer go over one month without cure, or excision, with microscopical examination. Above all things we should not treat it empirically as syphilis. If a so-called ulcer is allowed to go from three to six months, it regularly extends to the glands of the neck. Under those circumstances only one-half can be cured by the most extensive operation—namely, the dissection and removal of all the glands from one or both sides of the neck with wide removal of the lower lip. If, however, the true character of the lesion can be determined early, a wide "V-shaped" excision is curative.

Nearly all epithelioma of the skin can be cured by the actual cautery under anaesthesia in the early stages, provided it has not extended to the neighboring lymph glands. While radium and the X-ray have achieved their most brilliant cures in superficial epitheliomata, we must not lose sight of the efficiency of the actual cautery in these cases. Properly used it is one of the most satisfactory agents at our command.

Illustrative of the role that chronic irritation plays is the established fact that cancer of the gall bladder rarely, if ever, occurs in the absence of gall stones. Three percent of all patients who are operated on for gall stones have cancer of the gall bladder. What does it profit a person, therefore, to carry around gall stones that can be removed under proper conditions with a mortality of less than one-half of one percent; whereas, the simple carrying of the stones subjects a patient to six times that risk from cancer alone.

Likewise it has been shown that one-half of all the epithelial neoplasms in the kidney are followed or associated with stone in the kidney.

Why should we teach women higher mathematics and

give her suffrage and neglect to teach her that any lump in the breast in a woman over forty is or will become cancerous in thirteen instances out of fourteen? Collectively in all ages only one-half of the tumors are benign, and as only one-third of the cancers of the breast were originally benign, why should we leave them? Who can tell which tumor is or will become malignant? Why remove a fibroid or cystic tumor from other sites in the body and let the breast alone? We can tell if the tumor is frankly cancerous, but we can not tell if it is not. It is a stirring experience to find one out of every four cases of cancer of the breast, when first seen by the surgeon, is hopeless. One-half of the delay is from the patient's fear or ignorance. The other half is caused by the delay in our profession. "Observing" these growths is a dangerous pastime. The old advice to "not trouble the tumor until the tumor troubles vou" is a murderous sophistry. We must not wait for pain in the tumor. It may be too late. Puckering of the nipple, axillary and cervical metastasis are often waited for to confirm the diagnosis, more is the pity. When the diagnosis is thus confirmed we have waited for the very symptoms which then well nigh contraindicate operation so far as the permanence of cure is concerned.

Women should be taught that lumps in the breast at the start, if removed properly, give 85 to 100% of cure, depending upon whether it is or is not cancer. If it is left alone it gives from 85 to 100% of deaths, depending upon whether or not it is cancer. No growth should be removed, however, that is not carefully studied by a competent pathologist.

Inasmuch as inadequate and meddlesome operations upon a genuine malignant neoplasm is prone to disseminate the growth, we must seriously consider the wisdom of the radical operation in suspected cases without the halfway measure of partial removal, to be followed even in a short time by the so-called radical, or may be then too late removal. As a matter of fact the elaborate removal of the breast by the Halstead or Rodman method has a mortality of only one-half of one percent in the hands of an expert with all of our delay; the ignorance of the laity and other handicaps, nearly one-third of the cancers of the breast operated on, good, bad and indifferent, are alive and well after five years. This can be doubled by early diagnosis and insistence of wise and effective surgery.

Considering that the stomach harbors two-thirds of all the cancers of the gastro-intestinal tract, should we not employ a searching scrutiny in all cases of chronic dyspepsia to the end that those which are suspicious should be studied unremittingly to show cause why it is not cancer. If after thirty-five one man in every seven dies of cancer, and if the stomach causes one-third, it means that one man in every twenty-seven who reaches and passes that age is going to die with it, and yet but seldom is a diagnosis made early. Even when a surgical diagnosis is made only one-third can after exploration have the radical operation done.

It has been shown that 72% of cancer of the stomach that have been removed developed upon a chronic ulcer. Why "cure" a chronic ulcer over and over again. Should it not be excised like an indolent ulcer elsewhere? When they come to operation they have a history on an average of twelve years of soreness, and stomach trouble with many so-called cures. When a man past middle life has pain after eating that comes with considerable regularity at a rather definite time after food, that is associated with belching and occasional vomiting, investigate him closely. If it occurs in spells and finally he has a spell that is more prolonged than the others and is not relieved by the usual remedies, especially if he is losing weight and has a low percent of acid in the stomach, suspect cancer. If a man previously well should suddenly develop gastric symptoms without apparent cause, unrelieved in a reasonable time, Stomach tests are helpful. suspect cancer. The most important is whether or not there is retention of food. Obstruction with retention of food from eight to ten hours is usually surgical and probably cancer. This test is very simple and should not be neglected any more than we would neglect to catheterize a man with residual urine in suspected prostatic obstruction. X-ray examinations are also of benefit. Do not wait for coffee ground vomit, glands at the root of the neck, on the left side, and cachexia.

Tumor with obstruction and resulting vomit often tells When in doubt we would do well to make an exploratory incision. Curiously enough when the facts are presented to the patient they are usually willing to it, but we as medical men are prone to wait until all the returns are in before we can get our consent. If there is a hard metastatic mass in the plevis or a button-like protrusion of the umbilicus and especially if there is ascites, the time for surgical cure has departed. When the tumor is in the left side and fixed, the prognosis is bad, but a movable tumor in the pyloric end of the stomach should make the diagnosis. While only one-half of the cases at best can be diagnosed sufficiently early to do anything for them, let us diagnose that half. Of those who have the radical operation one-fourth live without recurrence for five years. That is an exceptional showing. One of my own cases is alive and well at the end of six years, after the removal of threefourths of the stomach. The mortality in resection of the stomach is only 10% on the average and 5% in the hands of the very expert.

It is interesting that although ulcer occurs more frequently in the duodenum, cancerous degeneration there is rare. It is said the pancreatic secretion is inimical to cancer. At any rate it is extremely rare in the small intestine. Mayo only had fourteen cases in fifteen years of which but five were operated on. I have reported a case of resection of forty-two inches of the small intestine for sarcoma in a boy of nine, who is alive and well at the end of three years.

In the last year I have had three cases of intestinal obstruction from a napkin ring carcinoma of the descend-

ing colon. They all occured in women. One had very competent medical examination three months before the complete obstruction, but she was fleshy, the growth was very small and was too high for proctoscopic detection. A skigraph of a bismuth enema might have shown the constriction and operation would probably have resulted in cure. We were able to remove the growth by the Mikulicz method and colostomy at the time of the obstruction, but unfortunately there was already metastasis in the liver at that time.

Cancer of the rectum, that is so frequent, is probably overlooked more than in any other situation, because of the various minor rectal symptoms. Blood which elsewhere is always a serious indication is carelessly dismissed as probably coming from piles. In fact, fifteen percent of my cases of cancer of the rectum coming for operation have not only been diagnosed, but previously operated upon erroneously for piles. Failure to examine thoroughly in this situation is the cause of most of our mistakes. In one of my cases the patient had received treatment for over two years, but had never been examined. Ulceration of the rectum should be assiduously watched, but never treated without the suspicion of malignancy.

In spite of the anatomical and physiological drawbacks, as well as the reasons for delayed diagnosis of cancer in this region, the radical operation has yielded 20% of recoveries at the end of four years.

The uterus is the organ most neglected in the early recognition of cancer. The irregular, atypical bleedings are mistaken for the change of life. Patients think that this is regular and neglect to consult the physician. More women die of cancer of the uterus each year than men were killed in the Franco-Prussian war. If it were possible to have every woman under competent medical supervision during the climateric, more lives would be saved by discovering the existence of cancer and the institution of radical treatment than is saved by quarantine or vaccination.

If little spots of blood are discovered on the clothing between the periods and this so-called "spotting" occurs from sweeping, stooping, defecation, etc., examination will often find an ulceration that is probably malignant. Our old time text book symptoms of pain, hemorrhage, and odor are not the diagnostic signs of early cancer, but often of late, far advanced, inoperable cancer with beginning cachexia.

We are confronted with more inoperable growths in this situation than perhaps any other, not only on account of its frequency, but on account of the misinformation of the laity. Herein lies a great opportunity for educative measures.

We must not be unmindful of the possibility of cancer in other than elderly women. I once had the sad experience of three patients in adjoining rooms in the hospital at one time with inoperable cancer, all of whom were under twenty-seven years of age.

In the early stages of cancer of the cervix radical operation is very satisfactory. In common with other surgeons I have a number of cases alive and well eight, ten and twelve years after operation. This, of course, means that all cases thus fortuitously diagnosed could be rendered equally immune.

The bones are a favorite and really the most frequent location of sarcoma; moreover sarcoma is the most usual tumor of bones; carcinoma is usually metastatic. The former growths most often occur in the long bones. If a swelling of bone grows very rapidly in young persons after injury, with pain, the suspicion of sarcoma is strong. X-ray picture is helpful. Don't wait many weeks. In central sarcoma pain precedes deformity, the joint is not involved and to move it is painless. Exercise does not cause pain, but it comes oftenest at night. Metastasis of bone tumors is very early. Amputation is, on account of delay and mistakes in diagnosis and from the horror of the deformity and disability, always a last resort. Few medical men rarely recommend it early when it could be of some value,

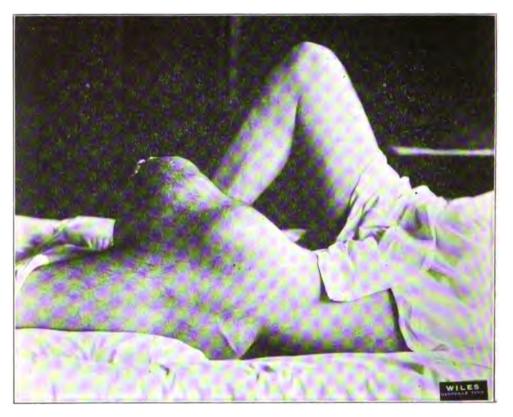


FIG. I. OSTEO-SARCOMA OF FEMUR IN BOY.

and fewer patients agree to it then. Unfortunately they are only too willing in the end when it is of temporary value. I recently amputated at the hip for a high osteosarcoma of the lower end of the femur (Fig. 1) that had been growing for four years, preceded by pain for two years and criminally treated for gonorrheal rheumatism at Hot Springs for sixteen months preceding the operation.

The crying urgency then is for the diagnosis of cancer in its very beginning. It will revolutionize the disheartened attitude now generally held. Formerly we did incomplete operations for advanced and hopless cancer with the result on the professional and lay mind that is yet so dispiriting. At present we are doing extensive and complete work in delayed but yet operable cases. The results are wonderfully better, but far from being satisfactory. The technical perfection is very high. The surgery of the future will be enhanced in efficiency and beneficence as the prompt recognition of cancer in universal. Countless lives will then be preserved and mankind protected from its greatest scourge.

# CLINICAL LECTURE ON "CARCINOMA OF THE BREAST"

IN SERVICE OF DUNCAN EVE, A.M., M.D., F.A.C.S.

Professor of Surgery and Clinical Surgery, Medical Department of Vanderbilt University.

REPORTED BY DR. ROBERT R. BROWN.

Gentlemen:

We have for to-day a case of cancer of the breast, so while we are waiting for the anesthetic, we shall endeavor to place the cancer problem more clearly and forcibly before you. Especially let us consider the earlier signs presented, now commonly called pre-cancerous conditions.

First let us bear in mind that 80 to 81 per cent of all tumors of the female breast are cancerous. This leaves a larger per cent of benign neoplasms than formerly taught.

Of the benign tumors a condition of chronic cystic mastitis is foremost in occurrence and importance. Dr. Rodman speaks of this condition as abnormal involution. It is a condition of hyperplasia about the glandular structures with resultant pressure cysts. This condition is often accompanied by a clear watery straw-colored fluid exuding from the nipple. Not the bright red blood significant of capillary cystadenoma, another potential cancerous condition. Forty to sixty per cent of these cases of abnormal involution ultimately become malignant.

We would also mention "Paget's disease" here to emphasize its importance and impress upon you that we now be-

lieve this condition to be primarily cancer—"Duct Cancer," and that the cutaneous involvement is secondary.

Now, what shall we do with these cases? Some say a two-stage operation. In the first stage tissue is removed for microscopical diagnosis and the wound closed, at a second sitting the radical operation being done. Gentlemen, we believe this an un-surgical procedure and in the face of a possible malignancy is wantonly courting disaster. Hówever, a modification of this procedure is now very commonly done, viz., making of frozen sections. This appeals to you, no doubt, as a sane measure, but still it is oftentimes misleading and besides can rarely be done because the pathologist cannot be had.

Operation for cancer of the breast was done as early as the third century, by grasping the breast with large pinchers and sweeping it off with a stroke of the knife, then searing raw surfaces with the cautery. In 1804 Benjamin Bell advised removal of the axillary nodes. Chas. Moore, however, in 1867 destroyed the old constitutional theory of cancer and is really the father of our present day operation. Thus the evolution of surgical advances for the removal of the breast with cancer until we have the radical operation of to-day.

The patient you notice, gentlemen, is a negro man 48 years of age, who came here six months ago with a large, freely movable tumor in his right breast. Malignancy was not suspicioned at that time and the breast proper was swiftly removed and wound closed. Microscopical examination later, however, revealed its danger, but by that time patient was about well apparently, and refused further surgery. To-day, however, he comes complaining of recurrence.

Due to length of time elapsed, other operations, etc., we are compelled at this sitting to do a radical operation. There are numerous modes or methods to pursue. In this case we shall follow the technique proposed by Prof. Rodman of Philadelphia.

The first incision starts one inch below the clavicle and one and one-quarter inches to the under side of the arm. It is five inches long and parallel with the arm. Cut down to the pectoralis major muscle, now pass the finger under muscle emerging between costal and clavicular portion. With retractors expose tendon of muscle at the same time avoiding injury to acromio-thoracic and long thoracic arteries, which run along the two pectoral muscles respectively. The tendons of both muscles being severed, we can now easily clean out the axilla. The costo-coracoid membrane is largely sacrificed, avoiding injury to the cephalic vein.

We now start dissecting from above downward and we do this you notice largely by gauze dissection, a sharp instrument being avoided in this neighborhood. The sheath and fat are removed from vessels, and the arteries and veins that supply the field are here severed between the two ligatures, thus avoiding subsequent trouble with hemorrhage. We now have the axilla clean, having worked from above downward and removed the tissues en masse. We now make a long incision from middle of first one, passing well over on to sternum and curving downward on to abdomen. A similar incision is made on lower or outer side of breast. Beginning below we remove fascia of upper portion of the right rectus muscle, then around, and as we undermine the skin we bear in mind that the cancer cells spread in a centrifugal manner from the primary focus, and through the lymphatics in fascia and sub-cutaneous connective tissue. As we complete this undermining you see we have all lymphatics blocked, thus preventing expression of cancer cells to set up secondary nodules. We now remove the breast by cutting the pectoral muscles at their origin. You will have noticed the small amount of hemorrhage during this operation, also how easily the skin flaps now come together following our extensive undermining. All oozing is arrested and the wound closed without draining, the skin being fixed firmly to chest wall by broad adhesive strips.

In conclusion we wish to urge upon you the value of an early diagnosis and operation. Do not wait for the old text-book symptoms of pain, fixation to chest wall, enlarged axillary and supraclavicular glands, and ulceration of the skin, which we would term contra-indications rather than symptoms indicative of operation.

At the last meeting of the American Surgical Association, just held at Rochester, Minn., the frozen section method due to its errors and impracticability was condemned and found but few advocates. They also spoke against the radical operation as a routine procedure, depending more upon an early diagnosis and complete excision of the mass.

#### CANCER OF THE UTERUS.

BY LUCIUS E. BURCH, M.D., F.A.C.S.

Professor of Gynecology and Dean of the Medical Department, Vanderbilt University.

The uterus is said to be the most frequent site of cancer in the female. It is a dangerous locality for this terrible scourge to originate, for the reason that metastasis takes place quite rapidly. In the hands of the best operators a radical cure is obtained only in about ten to twenty per cent. The most common predisposing cause is childbirth. It is rare to see it in a woman who has not had children or whose cervix has not been forcibly dilated. It is not a disease of old age, as is commonly thought by the laity, but is found more often in mid-life between thirty-five and fifty years of age.

There are three varieties, depending on the anatomical location. The first of these is spoken of as epithelioma, and springs from the squamous epithelieum, covering the vaginal aspect of the cervix. This is the most common variety of cancer.

The second variety springs from the cylindrical epithelieum lining the cervical canal. This is considered the most dangerous variety, on account of its proximity to the broad ligaments, consequently the spread of the disease occurs early.

The third variety springs from the columnar ciliated epithelieum lining the uterine cavity. This variety is not so malignant and not so common as the other two varieties. It is usually found also at a little later age.

Death generally occurs in from eighteen months to two years in cancer of the cervix. In cancer of the uterus the disease sometimes persists for five or six years, before carrying off the patient. Death, as a rule, is produced by a terminal infection, occasionally from hemorrhage, and sometimes from uremia, due to the growth occluding the ureters. The disease, as a rule, first spreads downward, involving the vagina. It has a tendency to spread forward to the bladder, and in the last stages the rectum becomes involved. The parametrium is early involved, and for this reason operators should go out laterally as far as possible in removing the growth. The glands that are situated at the bifurcation of the iliac vessels are usually involved at a late stage.

It is difficult, in many cases, to ascertain accurately by inspection the degree to which the growth has advanced. It is not unusual to see the vagina filled with cauliflower like mass with but slight involvement of the cervix. This is spoken of as the everting variety. On the other hand, with the inverting variety there may be a small ulceration externally, with extensive involvement of the deeper structures.

There are at the present time no known early symptoms of cancer. The two symptoms, however, on which considerable stress is laid and on which we, as scientific men, must base our suspicion of the disease, are uterine discharge and bleeding. In some cases the discharge appears first, in others, the bleeding. The hemorrhage, as a rule, begins as a slight show after exertion, defectation or urination. This gradually increases, and in some cases it becomes quite profuse, although rarely fatal. If a woman begins to bleed from

the uterus who has passed the change of life, there are ninety chances in a hundred that the cause of bleeding is cancer, and no physician should accept a case of this kind, unless the patient consents to a thorough examination. The discharge may be first an increased leuchorrea, or it may be thin and irritative. In the course of time it becomes blood streaked, at a later stage purulent, and in the last stages, of coffeeground appearance and of a nasty, stinking odor. Pain, as a rule. is not present until the last stages, and generally signifies that the disease is beyond operative interference. Loss of weight and cachexia are symptoms that are due to a terminal infection, and these symptoms, when present, are of grave prognosis. On vaginal examination the diagnosis, as a rule, is easy. A part or the whole of the cervix may be involved by the growth. If the disease has advanced to any degree, parts of the cervix are wanting, and in the last stages a large ulcer is found, covered with necrotic material and surrounded by a hard indurated area. Cancer to the touch breaks down easily and bleeds profusely. ulceration of the cervix in a woman at or past the menopause should be looked on as a serious matter, and a section should be removed from this ulcer and sent to a competent nathologist at once. This section can be cut out without the aid even of a local anaesthetic.

Diagnosis.—As a rule, this is easily made, for the reason that patients usually apply for treatment at an advanced stage of the disease. It is a great pity that the American woman is not educated up to the point of realizing that any abnormal discharge or hemorrhage might be the first indication of a uterine cancer. It is also a crying shame on the medical profession that the rank and file do not realize that the majority of ulcerations of the cervix are cancerous, and that any other true ulceration is exceedingly rare. If a patient who has been having an increased discharge or irregular bleeding applies to a physician, and on examination an ulceration is found, the diagnosis is easy in the great majority of cases. If doubt exists, a section should be re-

moved and sent to the pathologist. If no ulceration is present, then a curettement should be performed and the scrapings sent to the laboratory for examination.

Treatment.—To my mind, the best way to obtain results is to educate the public on this subject. All adult women should be taught the early symptoms of cancer and the necessity for an examination by a competent man, if any of these symptoms appear. They should also be taught the great part that trauma plays in uterine cancer. For this reason all women who are thirty years of age and over, and who have borne children should be examined. and if the cervix shows either an erosion, an eversion, a cystic degeneration or a general sclerosis, operation should be advised for the relief of this. It may be that repair of the cervix is all that is necessary, or it may be that amputation will have to be performed. Either one of the two, however, will remove a fertile field for the development of cancer. It has been recently discovered that cancer patients, in the early stages, have a natural immunity, and for this reason the earlier the operation, the better are the chances for permanent results.

The only method of treatment that offers a permanent cure is the radical operation Pan-hysterectomy. For this to be successful it must be carried out at an early stage of the disease. For those cases that have advanced too far for radical operation. I strongly advise the Percy treatment. The object of this treatment is to apply heat to the diseased part by means of a special cautery at a temperature of 120 to 130 degrees. This degree of heat will kill the cancer cells, and at the same time will not destroy normal tissue. water cool speculum is used to protect the surrounding parts from the cautery. This method is quite efficacious for advanced cases. It is not unusual to see patients pick up weight, the hemorrhage, discharge and odor cease, and for a period of a few months to five years they are in comparatively good health. It is also advisable to use the Percy method preliminary to Pan-hysterectomy, it being especially

applicable to those cases where there is considerable ulceration, odor and infection, as it will relieve, to a great extent, these conditions, and make the radical operation more simple and more certain. In the hopeless cases morphine should be given ad libitum.

# CANCER OF THE STOMACH—A CLINICAL LECTURE AT THE WOMAN'S HOSPITAL OF TENNESSEE.

BY M. C. M'GANNON, M.C., M.D., F.A.C.S.

Professor of Surgery and Clinical Surgery, Med. Dept., Vanderbilt University; Chief Surgeon of the Woman's Hospital.

Gentlemen: The patient upon whom we are about to operate, is a woman fifty years of age, who gives us the following personal history: She had pneumonia eight years ago. She has never suffered with typhoid or any other serious illness, since girlhood. Her menstrual history is negative. Her last menstruation was in January, 1914. For twenty years she has suffered with what she calls indigestion. She gives no history of at any time having had persistent vomiting. There is no history of blood having been passed from the bowels. This does not mean that such a thing has not occurred, but the patient has no knowledge of any such condition having existed.

The indigestion from which she has suffered for some years, was at first simply distress after taking food, the distress being more marked in an hour or two subsequent to its ingestion. She says that she always suffered with a fullness in the epigastric region and with belching of gases and of eructation of sour fluids. During the past year there has been more or less pain, pain of the persistent type, not particularly affected by eating and not increased when the stomach was empty. She has also had during the past year, vomiting from time to time. She has also lost some flesh. She is pale but can hardly be said to be cachectic.

An examination of the stomach contents after a test meal

which was withdrawn in an hour, showed that there was an absence of free hydrochloric acid, that lactic acid was present and that Oppler-Boas Baccilli were also present. This train of symptoms largely pointed to the diseased condition being cancer of the stomach and the diagnosis was so recorded.

In all people who are past the medium of life, that is, past the age of 40 or 45, who give a history of a chronic gastric disturbance, it is always well to suspect malignant disease. I believe that it is our duty in all such cases to make a persistent effort to determine whether the patient is, or is not, suffering from cancer.

The stomach is one of the most common situations for cancer; probably twenty-five percent of all cases of cancer are of the stomach. The disease is more frequent in men than in women and more frequent in whites than in colored people. For some unknown reason, the disease is very seldom found among negroes. It is a disease of advanced life. It is almost never encountered under 45 years, although a number of cases have been reported in very young people.

Heredity probably plays no part in its production. One thing that we have learned in connection with cancer, is that irritation tends to its development. It is not surprising then to know that ulcer of the stomach in many cases, is the forerunner of cancer; in other words, that the cancerous growth developes at the site of a healed or unhealed ulcer that may have existed for a more or less long time.

The train of symptoms that we do find in these cases and that have been clinically proven to be of great value, are (1) A history of gastric disturbance persisting over a long period of time and encountered in people past middle life, (2) At least two-thirds of all cases of cancer of the stomach give such a history, one-third of the cases begin suddenly, in patients who have previously had no stomach difficulty.

Anorexia is a symptom complained of by a great ma-

jority of those suffering with cancer of the stomach. It is a symptom when taken of itself, is of little value, but when combined with the other symptoms it helps in the diagnosis. This loss of appetite is often an early symptom and some special foods may be especially objected to. In the case that we have under observation, the patient was unable to eat vegetables or sugar. More commonly, however, these patients, (as one might expect, owing to the absence of hydrochloric acid from the stomach), have an aversion to meats and other proteid forms of diet.

Thirst is frequently complained of. The mouth is usually dry. The absence of a normal amount of secretion from the salivary glands is probably the explanation of the thirst since it is not due to any special loss of fluids from the body.

Our patient complained of eructations of gas and sour fluids, coming on rather late in her case. This symptom is the result of fermentation and in many instances is explained by stagnation of the stomach contents, due to obstruction of the pyloric orifice or to an atonic condition of the muscular coats of the organ. In these cases of eructation, the gases belched up are often malodorous. This disagreeable odor is of value as a late symptom when it may be due to the breaking down of the growth itself. In these cases it is usually combined with a history of bleeding.

Vomiting is by no means constant and cannot be relied upon for diagnostic purposes. In seventy-five percent of the cases it occurs at some time in the course of the disease. Unless there be obstruction of the pyloric orifice, it is not a persistent symptoms. When the disease, however, affects the pyloric orifice, producing more or less closure of this outlet, this symptom is marked and persistent.

The amount of blood that is vomited up is sometimes very large. The vomitus may be composed of mucous combined with the food that has been taken in, and with blood if ulceration be present. If the disease affects some other part of

the organ than the pylorus, the vomiting is not so frequent and may not be a symptom at all.

Pain at first may be nothing more than distress which comes on after eating. The pain is more or less constant and in this way it differs very much from ulcer, which produces pain after ingestion of food and is relieved when the stomach is emptied. The situation of the pain is not always in the epigastric region, but as a rule it is more or less complained of in this situation. When it radiates, and it commonly does, it is referred through to the back and sometimes is complained of in the shoulder.

Hemorrhage is a symptom presenting itself in at least fifty percent of all cases. It is seen in the vomited material either as clear blood but more usually as a dark material somewhat similar to coffee grounds. Once established it is persistent and unless the cancer be situated at the pyloric orifice, blood is seldom found in the stools.

Fever is not the rule but sometimes a low type of fever accompanies cancer of the stomach. This fever may be due to intercurrent disease, or due to the absorption following breaking down of the growth or to the effect of toxins upon the heat center. Sometimes it arises as a result of a local inflammation, that is, a perigastritis brought on by the extension of the disease itself.

An examination of the blood helps but little in this disease. The blood picture demonstrates a depreciation in the general health, since there is a decrease in the hemoglobin and also in the red cells. If there is much bleeding in connection with the case, the lowering of the hemoglobin percentage and the quality of red cells may be thus accounted for, but these conditions may occur primarily as a result of the disease itself. Leukocytes are usually slightly increased.

An examination of the urine may show merely a high specific gravity and a decrease in the amount voided. Indican is commonly present.

Tumor is not always to be felt. The tumor, however, may

not only be felt but actually seen. This depends somewhat upon the site of the growth. Recently a case upon which I operated, had been diagnosed as floating kidney, because the tumor was so mobile that it could be pressed up under the ribs and also to the opposite side of the body. Inasmuch, however, as it did not descend low in the abdomen, showing that its radiation from its point of attachment was not in the loin but over the attachment below the ninth costal cartilage, I was readily able to differentiate between mobile kidney and a tumor occurring at the pyloric end of the stomach.

When the tumor is made out its mobility is not much affected by respiration.

A tumor associated with the stomach, accompanied by the symptoms I have already detailed, is diagnostic of cancer; and almost prognostic since cases that have been permitted to reach this stage are seldom operable to the extent that a cure may be hoped for. When the tumor is present, in one-fifth of the cases the tumor will be at the cardiac end of the stomach, and in about one-third the number it will be found in the stomach wall, and in three-fifths at the pyloric end.

No effort should be spared to make the diagnosis before the stage of tumor is reached.

Cancer of the stomach diagnosed early, can be operated upon and removed with a large percent of cures. I have a number of such cases that have been operated upon more than four years and that are showing no symptoms of a return of the disease.

The incision that I am now about to make for the exposure of the stomach in this case, will be made through the right rectus muscle. You can readily see that through this incision, which is five inches long, that we are able to examine the gall bladder and the major portion of the stomach. We find that there is a tumor involving the lesser curvature and situated close to the pylorus. It has involved the whole thickness of the wall. There are a few nodules in the lesser

omentum. The indications are to remove the tumor and a sufficient amount of stomach so that we may feel that we are well wide of the growth. I have now secured the blood supply by ligating the vessels in this region and will double clamp the duodenum one inch below the pyloric orifice and divide the intestines between the clamps. The distal end of the gut is closed with a double row of sutures. We will now double clamp the stomach close to the cardiac orifice and at least one inch away from the tumor, and by cutting through the viscus between the clamps, one-half of the stomach is removed. The opening of the stomach is now closed with a double row of sutures, the sutures being so placed as to control all hemorrhage. This completes the first part of the operation and a thorough removal of the tumor with all tissues that seem to be in any way involved. We will now do a short loop posterior gastro-enterostomy which you see, as I proceed with the operation, is accomplished without great difficulty. We will now close the abdominal wall in the usual way. The after treatment will consist in placing this patient in a half sitting posture, and at the end of six hours we will begin to give her water freely. At the end of twenty-four hours she may be given albumen, and in one week's time, she will be taking liquid foods in generous quantities.

I would like again to impress upon you who are general practitioners, and who see these cases of chronic indigestion, the great responsibility that rests upon you in regard to them. In every case presenting the symptoms I have outlined, even in a mild degree, you should suspect cancer and use your very best endeavors to complete a diagnosis. When the diagnosis has been made you should insist upon an early operation, since the only chance for a cure in those cases, is an operation undertaken before the disease has reached the point when it extends beyond the stomach itself.

NOTE—This patient made an uninterrupted recovery and at no time had a temperature beyond ninety-nine degrees.

She had no nausea or vomiting subsequent to the operation, she complained of no pain or distress during her convalescence and at the end of three weeks was upon general diet and was dismissed from the hospital as cured.

## Editorial.

#### THE CANCER PROBLEM.

In accordance with a request from the "Commission on Cancer" of the Medical Society of the State of Pennsylvania, we devote the greater portion of this issue to the subject of Cancer, this request having been made to all the Medical Journals in the United States to publish a special "Cancer Number"—the monthly journals in the July issue, and the weeklies in the first issue in July. This request was responded to affirmatively by fifty or more of the leading journals, among which we mention the N. Y. Med. Record; N. Y. Med. Jour.; Am. Jour. of the Med. Sciences; Surgery, Gynecology and Obstetrics; Annals of Surgery; Pacific Med. Jour.; Maryland Med. Jour.; N. O. Med. and Surgical Jour.; and others, as well as a number of State Medical Journals, and we look forward to the advent of our July exchanges with considerable interest.

In compliance with the request, we are gratified to place before our readers four "Original Communications" from personal friends, all of whom are regarded as progressive and authoritative exponents of pactical professional thought; of national reputation; and prominent members of the teaching faculty of our great medical school, the Medical Department of Vanderbilt University. Our limited space necessarily imposed brevity on the part of our esteemed contributors; however, it is with sincere appreciation that we are enabled to present their very practical views, which we most respectfully and heartily endorse.

In further compliance with the request of the "Cancer Commission" for "an editorial expression," we will be limited to a few brief, cursory remarks on this exceedingly important subject. The following statement of Dr. Wm. B. Coley meets with our most hearty concurrence: "I believe that the time has come when we should give up trying to limit the term 'cancer' to tumors of epithelial origin, excluding those arising from connective tissue, though the latter may, and frequently do, equal and even surpass the former in malignancy. There is really no good reason for this distinction, and it is far better to go back to the older use of the word in which cancer included all varieties of

malignant tumors, whether carcinoma or sarcoma; the features of malignancy should really be the determining factor, and not some microscopic distinction in histological structure that is often so finely drawn that the trained pathologist is unable to decide upon the proper classification." Furthermore, in our own personal observation, there is quite as much if not more divergence in the clinical and gross characteristics of the various forms of cancer, epithelioma, schirrhus, encephaloid, colloid, etc., than there is between any of them and sarcoma.

Notwithstanding the many and repeated efforts of able and most earnest and painstaking observers, and while it is not justifiable to deny that cancer may be due to a parasite or specific germ, no positive evidences have so far been demonstrated. The highest microscopic powers and the many efforts at staining have been eluded. Since the work of Busse, the protozoic idea, by nearly all writers, has been given up and blasted, as also has any positive blastomycetic connection with the origin of cancer. The theory of embryonic tissue included in normal tissue, "embryonic rests," though not original with Cohnheim, yet taken up and advocated by him with all the force and charm characteristic of his work, long accepted by many able pathologists, falls short of explaining many important points in the etiology of cancer. It is possible that there may be certain chemical changes or differences in the tissues or tissue fluids of an individual suffering from carcinoma which are essential or favorable for its growth; yet such have not been definitely demonstrated. Nor can we accept traumatism as an essential etiological factor; for, although many cases originate at localities subjected to varying degrees of irritation and injury, cancer very rarely occurs on the hands and almost never on the feet, yet no other parts or portions of the body are so often subject to trauma; neither is the virgin breast or uterus exempt, although multiparous organs show a greater frequency of invasion. While heredity may have an influence, yet as a positive etiological factor, we can but accord it the old Scotch verdict of "not proven." The large preponderance of cases at middle life and later, does not occlude its appearance earlier, even in youth and childhood. We also can but admit a like vacuity of positive knowledge as to the tiological importance of occupation, locality, diet, etc.

Therefore, if pinned down to a categorical answer as to the nature and origin of cancer, we can only state that from some as yet unknown cause, heterologous cells may and do develope in any tissue, structure or organ of the human body, taking the place of the normal or homologous cells; these abnormal cells first producing a hyperplasia, subsequently passing on to degeneration and necrosis; in lieu of the normal wear and tear, waste, reproduction and repair of the original

homologous cells. At times, some of these heterologous cells pass by way of blood or lymph stream to other areas and tissues of the body, producing there secondary developments—metastases. These abnormal cells first by hyperplasia, disturbing or destroying normal function by reason of pressure; later, by more or less rapid disintegation and necrosis; inevitably resulting in a fatal result to the individual, unless arrested or removed at an early stage.

Admitting the importance of the standard and accepted classification—epithelioma, scirrhus, encephaloid, colloid, melanotic, etc., just as we would the color of the hair, skin or eyes for the purposes of description, together with some possible diagnostic and other effect, we prefer a simpler and more practical classification, having an importance as to treatment, and would classify all malignant diseases into two classes, operable and inoperable; the determination being dependant on the locality and stage of the pathological process. The truly wonderful advances in surgery as to skill, adeptness, etc., together with anesthesia and asepsis, have rendered many cases operable, so far as locality is concerned, that could not have been so considered a half, or even a quarter of a century ago; and requires only a reasonable degree of surgical knowledge.

As to when a cancer is inoperable by reason of its stage is a far more difficult matter. We would regard any cancer that recurs after a reasonably thorough removal with the knife, as having feached the inoperable stage or class; but this is "locking the stable door after the horse is stolen;" and is only mentioned as emphasizing the absolute—the paramount importance of early operation in all cases, even those resembling cancer. No case has ever or ever will be operated on too early; alas! and alas! only in far too many cases has the operation been too late!

It is an accepted fact in the surgical world to-day, that the earlier an operation is done in appendicitis, the more favorable—aye, to an almost definite degree of certainty, is the prognosis; and when we can get the people at large, and quite a large number too, of our mdical men, to accept this view as to cancer, then may we hope for a marked reduction in the heavy and increasing mortality from this terrible pathological condition. It is possiblt that the day may arrive when we will know more about its true pathology, but until then, let us take all the advantage we possibly can of what we do know and what we do not know. More satisfactory knowledge on any abtruse or difficult question will be obtained by admitting that we do not know some things, than by accepting some that are not so.

In our Department of "Selections" we have also given space to some articles on "Cancer" from late exchanges, all of which are important in consideration of so vital a question.

## TUBERCULOSIS NURSES AN IMPORTANT FACTOR IN MUNICIPAL HYGIENE.

New York City, with one hundred and sixty-five municipal tuberculosis nurses, has recorded a diminution in the number of cases of tuberculosis from 32,065 in 1910 to 22,752 in 1912; and a reduction in the death rate from pulmonary tuberculosis in Manhattan and the Bronx from 427 per hundred thousand in 1881 to 190 per hundred thousand of population in 1912, a reduction of 55 per cent.

Boston employs 25, Baltimore 17, Buffalo 17, Cleveland 15, and Columbus 6 visiting tuberculosis nurses, and all report a marked reduction in the mortality from the disease, some of these municipalities earnestly advocating an increase in the number of nurses.

On June 1, ult., the city of Los Angeles, by "initiative ordinance," adopted the following "Ordinance Providing for the Employment of Municipal Visiting Tuberculosis Nurses":

- "Section 1. The Health Commissioner of the City of Los Angeles shall and is hereby empowered and directed to employ, in the name of and for the City of Los Angeles, municipal visiting tuberculosis nurses, in the proportion of one such nurse per one hundred reported cases of tuberculosis in the City of Los Angeles.
- "Sec. 2. The municipal visiting tuberculosis nurses thus employed by the Health Commissioner of the City of Los Angeles, shall be paid by the City of Los Angeles at the rate of compensation provided for Municipal Nurses in Section One of Ordinance Number 28, 179 (New Series).
- "Sec. 3. It shall be the duty of the municipal visiting tuberculosis nurses of the City of Los Angeles to visit professionally all reported cases of tuberculosis in the City of Los Angeles, excluding those under treatment in public or private hopitals or sanatoria, unless requested in writing not to do so by the patient or physician in charge.
- "Sec. 4. The Health Commissioner of the City of Los Angeles is hereby empowered to establish such supply stations as he may deem necessary from time to time for the professional use of the tuberculosis nurses provided for in this ordinance.
- "Sec. 5. The Purchasing Agent of the City of Los Angeles is hereby directed to purchase on requisition from the Health Commissioner such supplies as the latter may from time to time deem necessary for the professional use of the tuberculosis nurses provided for in this ordinance.
- "Sec. 6. The Health Commissioner shall divide the City of Los Angeles into appropriate sections or districts and shall assign one or more tuberculosis nurses to each and every section or district thus formed according to the number of cases of tuberculosis therein, ex-

clusive of those under treatment in public or private hospitals or sanatoria.

"The tuberculosis nurse shall be held responsible for their respective sections, but may at the discretion of the Health Commissioner be given work outside of the sections to which they are assigned."

We have given the ordinance in full, as being a most excellent model for other municipalities. It was drawn and fathered by our genial confrere, Dr. Geo. E. Malsbury, Editor of *The Southern California Practitioner*. The "initiative petition" received some 20,000 signatures, more than four times the required number, and was adopted at the June election by a vote of 47,359 to 25,681.

A VALUABLE LAXATIVE:—In view of the many varieties of liquid petrolatum with which the drug market abounds, and the questionable quality that distinguishes much of it, physicians will welcome the announcement that Parke, Davis & Co. are supplying a product, under the designation of American Oil, that bears a substantial guaranty of purity and efficiency.

American Oil, P. D. & Co., which is distilled from American Petroleum, is a product of high specific gravity and great lubricating power. It is tasteless, colorless and odorless, and is guaranteed to be free from sulphur compounds, acids, alkalies and all harmful byproducts.

American Oil is not a purgative, neither is it a laxative in the general sense of stimulating the bowel by local irritation. Its function is that of an intestinal lubricant. It passes in toto through the alimentary tract, not a particle of it being digested or absorbed. It mingles with the food in the stomach and upper intestinal tract, with the result that the feces become thoroughly lubricated and pass through the lower bowel more rapidly than they otherwise would and are expelled from the colon more promptly and with greater ease. Not the least valuable feature of this liquid petrolatum is its protective effect on the stomach and intestines, it being well known that abrasion or irritations of the mucous surfaces permit bacterial infection and general toxemia.

American Oil may be taken with a pinch of salt or a dash of lemon juice, if the patient so desires, or it may be floated on a glass of water, wine, milk or other beverage. The dose recommended for adults is one or two tablespoonfuls morning and night, before or after meals, for the first two or three days. Later the amount may be diminished. To insure against possible mistakes, physicians will do well to specify "P. D. & Co." on their prescriptions.

THE NEURASTHENIC INVALID:-Like the poor, the neurasthenic is "always with us," and while the stress and strain of modern life and living continue, the physician will be called upon to treat the more or less chronic invalid who exhibits all sorts of bizzare symptoms, in endless and kaleidoscopic variety. It is, of course, an easy matter to advise the physician to search out and remedy the operative cause of the disorder, but it is not always as easy to do this, especially when no organic changes are discoverable. While purely symptomatic treatment may be unscientific, it is usually essential, in order to gain and retain the confidence of the patient. There is, however, one pathologic finding in a large majority of cases, and that is anemia of greater or lesser degree. In some instances this may be found to be the essential cause of the neurotic symptoms. In any event, this condition should be corrected, and for such purpose there is no better remedy than Pepto-Mangan (Gude). When a hematinic is indicated for a nervous, cranky man, or a finicky, more or less hysterical woman, Pepto-Mangan is peculiarly serviceable, as the patient cannot consistently object to the taste, which is agreeable to every one. digestion is not interfered with in the least, constipation is not induced, and the blood-construing effect of the remedy is prompt and certain. It is always worthy of trial not only in the anemia of the neurasthenic invalid, but also in all conditions of blood and tissue devitalization.

THE FAIRCHILD TABLET OF THE BACILLUS BULGARICUS contains the bacillus of the Fairchild Culture, type A, conserved in a vital state with a particular "resistance" and length of life, in consequence of methods thoroughly worked out, scientific expert technic. The tablet should not, however, be unnecessarily exposed to ordinary summer room temperature.

In warm climates and at long distances, the tablet, obtained under proper conditions, is especially suitable and reliable.

The Fairchild Lactic Bacillary Tablet proves effective "in combating putrefactive organisms producing intestinal autointoxications," both chronic and acute; also (in suspension) for local application in body cavities, genito-urinary, oral and nasal passages.

Particulars, clinical data, etc., will be sent you upon request, by Fairchild Bros. & Foster, Washington and Laight Sts., New York, N. Y.

PHOSPHO-MURIATE OF QUININE, Phillips, is a most excellent tonic and reconstructive and has a marked beneficial effect on the nervous system. It will give you good results in malarial and other convalescence, especially during the hot days of the summer season.

MEXICAN DRUGS:—The warlike disturbances in old Mexico are responsible for many troubles of manufacturers and importers of botanical drugs. Mexico is the source of quite a number of our medicinal plants, and some of these are practically unobtainable. It seems to be unsafe for the peons, who usually work under the supervision of a professional collector, to venture far away from settlements, and even when they succeed in gathering a shipment, there is no guarantee that it will ever reach the border. For more than twenty years Cereus Grandiflorus, used in the manufacture of Cactina Pillets, has been cut on the mountain slopes of the Vera Cruz range situated in the state of Tamaulipas. The Sultan Drug Company states that very few shipments have found their way into the United States, and at one time they were greatly concerned about the safety of one of their collectors, an American who has lived in Mexico many years. For some time past the Sultan Drug Company has been carrying at least a year's supply of Cereus Grandiflorus ahead, as the dangers of this unsettled condition were anticipated.

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

THERAPY OF NERVOUS HEADACHES:—The advantages of Pasadyne (Daniel), the concentrated tincture of Passiflora Incarnata, as a means of relief in headaches of a nervous type are so marked that it seems to warrant the distinction of being put in a class by itself. In this condition, Pasadyne (Daniel) not only soothes the cephalalgia but also exerts a potent force on the nervous element so noticeable in these cases. It may be given to women and children without causing unpleasant symptoms, often times a feature of other agents. It has no concern with the Harrison Act. A sample bottle for trial may be had by addressing the laboratory of John B. Daniel, Atlanta, Ga.

CYSTOGEN-QUININE TABLETS is a new Cystogen preparation composed of Cystogen ( $C_6$   $H_{12}$   $N_4$ ), 3 grains and Quinine Alkaloid, 1 grain (representing about one and one-half grains quinine hydrochloride).

The value of this combination, as well as its convenience of presentation, will be readily appreciated because of the antiseptic and slightly stimulating action of cystogen on the secretions and excretions of the abdominal viscera and the well-known action of quinine.

Cystogen-Quinine Tablets are packed in boxes of 25 tablets and in bottles of one ounce or 87 tablets.

Samples on request will be sent you by the Cystogen Chemical Co., 515 Olive Street, St. Louis, U. S. A.

WAR PRICES:—The enormous advance in the price of drugs, owing to the European war, is well exemplified in the bromide salts. Bromide of Potassium, for instance, which sold before the war at 35c a pound, is now quoted at \$1.25 per pound, and the other salts have advanced in proportion. The very high price and scarcity of these salts is a great temptation for substitution. The safe way for the physician is to prescribe Peacock's Bromides, which, in spite of the great advance in the cost of manufacture, is still sold at the old price. Its formula has not been changed and this is a guarantee of uniformity and purity.

SUMMER-TIME AND SUN-BURN:—Dermatitis Calorica, Dermatitis Venenata, and similar inflammations of the skin, peculiarly prevalent at this season of the year, call for Antiphlogistine applied thick, and, in Burns, especially—cold.

Antiphlogistine, in the regular routine of practice, is applied hot. This is because moist heat continuously applied in congested states, quickly restores normal circulation—the *first step* in the reparative process in all inflammations. *Cold* Antiphlogistine is more agreeable in the *early* treatment of Burns.

At The Top:—In medical literature, it is claimed that, in the treatment of Anorexia, or loss of appetite in nursing infants, sweetened condensed milk is "at the top" of infant foods—equal, and in the opinion of authorities—superior to medicine's best. It stimulates where other stimulants fail. Apply this medical discovery by using Gail Borden Eagle Brand Condensed Milk. It is essentially the restorer of the subnormal appetite. Nursing babies in the last phases of Anorexia retain it when they cannot take the breast or ordinary milk.

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THE MORRISON ANTI-NARCOTIC LAW:—Our readers are respectfully reminded that the registration and license taken out under the Anti-Narcotic Law of March 1st, ult., expired on July 1st, int. If you have not done so, renew the license at once. The fiscal year begins July 1st, and the renewed license will be good until July 1, 1916. If you need them, send for more official order blanks, price one cent each, and sold in blocks of ten.

ALL THE SALICYLIC ACID in Tongaline is made from the natural oil of wintergreen, and not from coal-tar. No imitation, substitute, or ordinary extemporaneous formula as dispensed by the average druggist will give the same satisfactory results.

### Selections

WHY WE SHOULD HAVE A WAR AGAINST CANCER:—It is a fact that cancer kills about 75,000 people in the United States every year. Any disease which causes such a high annual toll should command the careful attention of the Government, the medical profession, and the people. The need for this careful attention is all the more imperative if both the morbidity and mortality can be very largely reduced by co-operation on the part of these three forces, i. e., the Government, its people, and their physicians.

The reduction that has been caused in tuberculosis is now a matter of history. There can be no doubt that similar well-directed and persistent activity would cause a similar effect in cancer.

The key to the reduction of cancer mortality lies precisely in this: That cancer always begins as a purely local disease involving a strictly limited area. Second, that this limited area is accessible in about four-fifths of all cases; and third, and most important, a commencing cancer practically always indicates its presence when it is still in its early, locally limited, and permanently curable stage. In other words, the enemy that we have to fight is not the cancer, but the delay. Nearly 60,000 of our people die every year, not because they have cancer, but because they have waited till the cancer became incurable.

Th causes for delay are, first, that the people know little or nothing about cancer. The layman or laywoman does not know that certain evident signs and symptoms mean that cancer is insidiously creeping on them and will be fatal unless recognized and checked in time. So that a large proportion of our 60.000 unnecessary cancer deaths occur because the people do not know. If a woman has a right to kill another human being to save her own life when attacked, how much more has she the right to know that a fatal disease has begun its attack on her? A woman who loses her life at forty simply because she never knew that irregular vaginal bleedings indicated the presence of a cancer while it was in its early curable stage certainly has not had her fair chance at the hands of civilization. If our people are dying because they do not know, we, the doctors, must teach them. We must teach women that a lump in the breast, no matter how small or how painless, may be the starting point of a serious condition and must at once be investigated by a competent physician. We must teach women that irregular vaginal bleeding, the onset of a discharge, etc., may be early warning symptoms of cancer of the uterus. We must teach all people that a mole or a wart which begins to grow, bleed, or ulcerate is a danger sign that must be heeded at once. There are similar early signs in other portions of the body that may forewarn people, and of which they should have accurate knowledge.

There is also a great field in the conditions marked by chronic irritation and the so-called precancer lesions. Recent statistics show that in about 40% of cases the cancer.

the malignant disease, was preceded by long-continued simple diseases or by some form of chronic irritation. In other words, a large proportion of cancerous people need not have had the disease at all if they had been forewarned and had their precancerous condition cured.

The second great problem lies with us as medical men. Are we as active in the treatment of precancerous diseases as we should be, or do we only too often put our patients off with some placebo and advise them not to worry? Do we always insist on a thorough examination when a patient comes to us with symptoms that may mean cancer? When an early cancer is present, do we always lay proper emphasis on the necessity for proper treatment at once? Do we not too often advise the one course which can yield to disaster and tell our patients to wait and see what develops, i. e., wait till the cancer becomes inoperable? Unfortunately at the present time these questions must be answered to A recent extensive investigation has our disadvantage. shown that on an average the family physician has had his cases of cancer under observation for about a year before they come to a real attempt to cure the disease. Our attitude to cancer needs to undergo a radical change. The average of one year's observation must be cut down to a few weeks, or, best, to a few days. Immediate attention to the precancerous condition, counsel in the doubtful cases, and immediate action in the positive cases, is the only proper service we can give our patients. To do this, we need a campaign amongst ourselves, too. A new and more efficient spirit must be created which will result in constant watchfulness to keep our patients from swelling the thousands of untimely and unnecessary deaths from cancer.

To arouse the profession fully to the necessities in the war against cancer, a movement has been started by which, during the present few months, State and County Societies all over the country are devoting special meetings to the study of cancer, and in addition, the vast combined influence of American medical journalism has been enlisted, and the

Southern Practitioner has united with a number of other medical journals to provide for its readers special cancer numbers. It would seem from the number of journals cooperating that the message must be brought directly to every medical man. We are sure that in this way the interest of the medical profession will be aroused for years to come, and we are sure that the time will be soon at hand when no blame for participation in the fatal delay can ever be laid at the door of an American physician.—Circular of the Commission on Cancer of the Medical Society of the State of Pennsulvania.

THE CANCER PROBLEM:—No discussion of vital questions of public concern at this time would be complete without some reference to the menace of cancer. In less than a generation the proportion of this disease has grown enormously in the mortality tables. Always grouped among the horrors of the ills of flesh, cancer has recently come under the searching processes of the laboratory and of public health study.

We are working with an insidious enemy of the human race. Theories have come and gone, each aiming at the solution of the cause. The contagiousness of cancer is still unproven—while its types are known and its relief largely accomplished.

Cancer may come from some unknown principle of growth, seeking its soil in an individual who has been racked by the vicissitudes of modern civilization and the struggle for existence. Some ancestral evil may have laid a heritage of undeveloped danger zones, waiting accident or occasion to fulminate in disease. There may be centers of piled up fabric left over in the embryonic growth of the individual and resting safely in some out of the way boundaries of the human frame—until the danger line of inflammation is crossed and the material breaks into activity at the cost of the mutilation or the life of the individual who has been the victim of such circumstances.

There may be some chemical product related to our food, to-day more potent in the exigencies of modern conditions, which acts as toxic material to one predisposed and finding some weak point of defense, enters the cell life of the individual and starts one or more areas of destruction, ending with the last struggle of an unresisting frame.

The story of recognized cancer is not new. The laboratory for a long time has been able to fix the types. What may be mild cancer to-day, by to-morrow may show great malignant strides. Surgical skill, medical interference, the x-ray, radium and other means have made the outcome hopeful, for probably more than seventy per cent of cancer cases, properly treated and seen early, are cured. But the great fatality in the United States to-day among cancer victims causes pause and invites more than a momentary thought for the future. The recent records indicate that over seventy-five thousand lives in the United States are lost from cancer annually. What an army of souls is sacrificed to the helplessness of medical science on the one hand and on the other to the ignorance and neglect of the afflicted.

Put this thought before you: Most cases of cancer taken in time may be cured by known measures of relief. Why more are not cured is because they come too late, often after experimenting with the advertising quack or the inexperienced attendant. The early signs of external cancer are often easily perceived and may be summed up in few words.

External growths, tumors, warts, moles, scaling spots, persistent abrasions, ulcers, and excoriations are suspicious. When these increase in size, they sound a danger signal. When they are about the eyes, ears, nose, lips, on the tongue, on the breast, or about the genitals they have reached the point where advice should be solicited from the best authority obtainable.

When moles or other smooth growths begin to roughen or scale, they need immediate attention.

With internal cancer more technical terms apply, but perhaps here, too, plain advice may be given in few words. Women with any persistent abdominal pain, should solicit special advice. Acute, continued gastric pains, particularly after food, are serious enough to be suspicious. Accompanied by loss of weight they are serious. It is far better to find a simple condition, easily dismissed or eliminated, than, by delay, occasion a state beyond ready relief and often taxing the skill of the surgeon to meet it.

The physician is often at fault. By ignorance or minimizing growths of suspicious character, he condemns his own discernment; he often victimizes his patient by allowing him to rest upon a possible delusion, until the full growth of an early lesion is attained.

The tinkers among doctors, too, do harm. No simple wart, mole, scaling patch, or the like should be burned with irritant caustics; the cauterization should be thorough, deep, and complete—the best procedure is full elimination by the knife, and where this is not practicable, by other means which leave no relic of the growth.

The propaganda against cancer is multiplying. Every man should carry the message that prevention by early recognition and treatment is possible and this should be practiced by everybody, everywhere.—Report of U. S. Pub. Health Service.

THE EARLY DIAGNOSIS OF CANCER OF THE UTERUS\*:— The physician who waits for the yellow flag before diagnosing disease of the biliary passages justly merits the condemnation of his colleagues. How much worse is the man who waits for profuse hemorrhage, foul discharge, pain and other signs of well advanced cancer of the uterus, before giving the woman a fair chance for her life? While the fault lies mainly with the women in not seeking medical



<sup>\*</sup>Read before the Surgical Section of the Norfolk County Medical Society, at its meeting, February, 1915. By Edward T. Hargrave, M.D., Norfolk, Va., Gynecologist Out-Patient Department, Norfolk Protestant Hospital.

aid early, are we not to blame when we fail to impress upon them the great danger of any and all irregular discharges? No physician has the right to class slight hemorrhages as a deviation of normal menstruation, or as an approach of the menopause, without excluding cancer by the employment of precise diagnostic methods. Where neurasthenia and malaria have led thousands of tubercular cases beyond the goal of hope, the menopause has led its tens of thousands beyond aid. We have often been misled in the past by age, but since the adoption and routine application of modern diagnostic methods, many early cases have been found in women under 25. No man, however great his experience, can say with certainty that a lesion on the cervix is benign. from the history, inspection, absence of hemorrhage or induration. In a very slight opportunity the writer has had to study the clinical aspects of these lesions, he has seen men of wide experience in gynecology and pathology pronounce a lesion on a cervix as benign, when the routine examination revealed beginning carcinoma. We must be constantly on our guard to detect the disease in its earliest stage, for upon an early diagnosis hangs the only hope for permanent cure.

There are no pathognomic signs in the early, and therefore most favorable cases, and it is our duty to investigate thoroughly every case presenting:

- 1. Any atypical bleedings, including all cases of menorrhagia and metrorrhagia; all deviations from the normal menstruation; return of bleeding after the menopause; bleeding after exercise, defectaion, etc.
- 2. Any increase in the amount, or change in the character of the discharge in a woman who has leucorrhoea.
- 3. Any irregularities on the surface of the cervix, whether they bleed on touch or not.

In the consideration of the early diagnosis of cancer, it is well to remember that the primary location of the lesion is of more importance than its histology from the standpoint

of malignancy. In order of frequency is found, first, cancer of the vaginal portions of the cervix; second cancer of the uterine body, and third, cancer of the cervix proper. In order of malignancy, lesions in the cervix proper come first, vaginal portion second, and uterine body third. reason for the greater malignancy of the disease occurring in the cervix proper is chiefly due to the fact that the uterine body easily dilates, while the cervix holds the tissues in close contact with the lesion by reason of its small canal and unyielding walls. The most insidious cases are those occurring in this locality. Bleeding on touch is considered an early sign, yet it is impossible to feel a nodule within the cervix when the os is closed. Inspection of the vaginal portion of the cervix may or may not show a nodular area, and often it is apparently normal. However, every nodule seen on a cervix should be examined.

Text-books on gynecology give a long list of lesions to be differentiated from cancer by a physical examination, history, etc., but no such examination is trustworthy without a microscopic examination by a competent pathologist of sections of the cervix or curettings from the uterus. Frankl of Schauta's clinic stated that in 1007 cases that applied for treatment, only 34 could be classed as early cases. He classed as early cases only those in which a microscopic examination was necessary for a diagnosis. Of this number, 32 were well after a period of five years, the absolute accomplishment being 94 per cent. Compare this percentage with the absolute accomplishment of only 16 per cent. of those who applied for treatment.

A systematic diffusion of knowledge among young women of the early symptoms of uterine cancer, and its cure by early surgical intervention, should be instituted by boards of health, doctors, and nurses. I hope I shall see before long the newspapers of this country forced by public opinion to desist from defrauding sick men and women by printing false advertisements. Freedom of the press should not

carry with it the right to rob the ignorant of their health and life.

In conclusion, I insist that it should be a matter of routine to have a pathologist examine the tissues in every operation upon the cervix and curettings from the uterus. No one in the profession performs a greater service than the pathologist in detecting the early cases and saving life, and his remuneration should be in keeping with this service.—Va. Med. Semi-Monthly.

THE DANGER OF DELAY IN CANCER: -Thousands of lives now needlessly sacrificed to cancer could be saved if the patient would go to the surgeon as promptly as does the average person attacked by appendicitis. Nor is there any reason why the cancer patient should not seek this, the only safe treatment, with the same high degree of confidence in the outcome that is now common among those suffering from the other more fashionable disease. Unfortunately, the evidence is only too clear that a different attitude toward cancer prevails and occasions many preventable deaths. The almost superstitious dread of the disease and unwillingness to admit its existence or to seek medical advice in time are well known and difficult obstacles to progress in its control. Proof of this fatal neglect is found in the experience of a prominent surgeon who recently studied his case records in order to obtain definite information as to the delay in the average case. Of 65 recent patients, 35 were men and thirty were women. Further study of these 65 cases showed that after the first discovery of suspicious sympathy the men had waited an average of 12.2 months before consulting the doctor, and the women had waited, on the average 11.9 months, practically a year's delay in all cases. Many other surgeons could produce very similar records. Winter, of Konigsberg, Prussia, the pioneer in the education of the public in regard to cancer, examined the records of 1,062 operable cases and showed that 87 per cent. of these patients could and should have applied for treatment much earlier,

when they would have had a far higher chance of recovery than was actually the case.

To the delay when the symptoms are manifest must be added the previous indefinite period after the beginning of the disease and before the patient realizes the trouble. This period can be shortened by education. Fortunately, the symptoms of cancer are present quite early and can usually be recognized if the patient understands their importance. In too many instances, however, the disease is not suspected until the symptoms are pronounced or until there is a tumor of considerable size. If we assume that this period averages six months, and then add the year's delay for which the patient is responsible, we find that the average patient does not seek advice until at least a year and a half after the onset of cancer. This precious time, thrown away, means, if not a fatal outcome, at least a serious instead of a minor operation.

In the present state of our knowledge of malignant disease it cannot be too frequently emphasized that the hope of curing cancer is to be found in its earlier recognition and in prompt and competent surgical treatment. The unfortunate patient who, because of ignorance or unwarranted fear or the blandishments of quacks, hesitates to seek proper advice should realize that in this delay he or she is recklessly throwing away a splendid chance of cure.—American Society for the Control of Cancer.

THE CONTROL OF CANCER DEMANDS OUR ATTENTION:—Such a menace has this disease become to civilized nations and so much to be dreaded is it for the suffering entailed as well as its ultimate outcome, when not taken in hand in its beginning stages, that cancer is attracting more widespread attention in the medical profession and medical organizations every year. A toll of 75,000 lives is taken in the United States each year from this one disease, and many of these deaths are preventable if, as stated by the American Society for the Control of Cancer, "the patient

would go to the surgeon as promptly as does the average person attacked by appendicitis."

It being now conceded that cancer is at first a local growth and not a systemic disease as was formerly supposed, medical organizations are more and more trying to impress upon the laity as well as upon the profession the necessity to look out for the early warning symptoms and treat them without delay. As pain is rarely present in a beginning external cancer, a lump, scab, or an unhealed wound or sore should not be allowed to continue without at least being investigated. An abnormal discharge from any part of the body, especially if bloody, persistent indigestion, or loss of weight with change of color should be viewed with suspicions until proved not to be a beginning cancer, as it may prove the adage of "an ounce of prevention is worth a pound of cure."

Cancer is a disease chiefly of middle and late adult life and is more common among women than men. The organs attacked in order of their frequency, according to statistics of 1913, are the stomach and liver, the uterus and other organs of generation, and the breast, cancer of other organs and parts causing only one-third of the deaths from cancer for that year.

The only solution of the question as to how to control cancer is in the removal of every vestige of the disease and, for this purpose, an early diagnosis is all important. The services of the most eminent surgeon can avail little if the disease fails to receive early recognition and treatment.—

Va. Med. Semi-Monthly.

"Some Important Memoranda for the Busy Practitioner" is the title of a little brochure published by the Fellows Company, containing a mass of useful information which is put in a terse concise way, particularly useful for the busy practitioner, also a diet table for tubercular patients. If you have not already received a copy it would pay you to write to the Fellows Company for one.

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## Priginal Communications.

## TUBERCULIN TREATMENT IN PULMONARY TUBERCULOSIS.

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Soon after the announcement by Robt. Koch in 1882, of the discovery of the tubercle bacillus there quickly followed many attempts to destroy the bacillus in the tissues of the infecting organism by the administration of various substances found to kill it in vitro. All such attempts were, of course, futile, especially since many of the substances that were recommended which if used in sufficient strength would have killed the host as quickly as the parasite. The literature during that period abounded in wonderful cures and marvelous results obtained by some, from the use of the so-called "false specifics," only to be followed by others, by deep disappointment and ultimate abandonment of the remedies. Today a sign of the times is the paucity of publications referring to fresh or new remedies aside from the specific treatment of tuberculosis by the various tuber-

culins. A perusal of current literature reveals an unmistakable increase in the actual practice of the specific treatment of tuberculosis, and also palpable progress in the growth of our knowledge of the main lines along which it should be conducted.

When Koch, in 1890, proclaimed his sensationad discovery of a specific remedy against tuberculosis, perhaps there was never an announcement made in the realm of medical science that carried with it so much hope as did that of the discovery of tuberculin. Koch made two claims for tuberculin: first, that it causes a specific reaction in tuberculosis individuals; and, second, that it has curative properties. For its administration he laid down the following very sensible rules, and if they had been followed the world would have been spared those dreadful scenes which resulted from its early trial: 1. Only patients that have little or no fever and in whom the process has not advanced too far, are suitable for treatment. 2. One begins with a very small dose and increases it so slowly that only very slight reactions or even none at all take place. 3. If reactions take place tuberculin must not be injected again until the temperature has been normal for one or several days. 4. The treatment with tuberculin must be repeated till, after an interval of three or four months, the capability of reaction is permanently extinct (Pottenger, p. 168). These rules, although formulated twenty-five years ago are even safe for today. Of course, all these years of experience have taught us different methods of administration as well as its employment in selected advanced cases. Koch's rules were absolutely disregarded. Large doses of tuberculin were administered to all sorts of cases, and many a poor, far-advanced consumptive was hurried to his grave. A patient, for instance, was given tuberculin and reacted to 104 deg. F. on the following day, when he received a second dose with similar results. This was continued in many cases until death ensued. It was not long before the

majority of physicians dropped the new remedy with as much avidity as they had taken it up. The age of "tuberculin terror" may be said to have begun at this time and he who used tuberculin was looked on by many as a criminal. In spite of the great disappointment which followed its misuse, in spite of the fact that much harm was done and death hastened in many instances, there were a few great and far-seeing minds who grasped the meaning of the remedy and realized that Koch had introduced a therapeutic agent which was destined to live. To a few German physicians, Goetsch, Spengler, Krause, Heron, etc., led by Koch; and to Trudeau, Von Ruck, Pottenger and others in this country have been instrumental in causing a reconsideration and new trial of this remedy.

Notwithstanding their consummate efforts in behalf of tuberculin this revulsion of feeling on the part of the profession lasted for some years, but about 1898 interest in the remedy was revived. Infinitesimal doses were given, and an attempt was made to render reactions of minimal occurrence instead of considering them the great desideratum. The present period could appropriately be called the "tuberculin renaissance era," which began a few years ago. Apathy has given way to enthusiasm. Again the scientific world is inflamed and the pendulum is swinging the other way. It is well for us to pause a bit less this very enthusiasm lead us to discredit a method which, when used rationally and understandingly, is unquestionably a most valuable aid in the treatment of tuberculosis.

#### THE TUBERCULINS.

The term "tuberculin" is a broad one and has been applied to nearly all products made from the tubercle bacillus, but in reality belongs only to those which are made from the culture fluid on which bacilli have been grown.

There are described between fifty and sixty varieties of tuberculin. Of these only a few will be considered while others being either modifications of these or having proved inefficacious.

The first used was Koch's original tuberculin, "O. T.," called also Old Tuberculin to distinguish it from his more recent products. "New Tuberculin." (1) The original tuberculin Koch (O. T.) is the concentrated germ free culture media (Glycerin bouillon), in which the tubercle bacilli were allowed to grow for several weeks. **(2)** Filtrtate, "B. F.," is the unheated, unconcentrated, filtered (through porcelain) bouillon culture of human tubercle "New Tuberculin," Tuberculin R., "T. R.," bacilli. (3) or "Tuberculin Residue." This is prepared by growing a virulent culture of tubercle bacilli. They are dried in the dark in vacuo and then pulverized. The powder thus obtained is suspended in distilled water and centrifugated at very high speed for about thirty minutes. The water (which is called tuberculin obere "T. O.") is then drawn off, discarded, and the bacterial residue is again dried in vacuo, as above, and treated in the same manner. This is done for several times. It is supplied in liquid form, containing 2 mg. of the powder to the C. C. of 20 per cent glycerin solution. (4) Bacillen Emulsion, "B.E." This is Koch's latest product, which he has suggested for active immunization. It consists of an emulsion of the ground up tubercle bacilli in equal parts of glycerine and normal saline solution. (5) Bovine Tuberculin. Perlsucht Tuberculin (P. T. O., Spengler) is made from the bovine bacilli without subjecting the culture fluid to heat which it is believed injures its activity. The bacilli are grown until they form a covering on the culture medium when they are removed by filtration and the filtrate concentrated by placing in an incubator until it equals one-half of its original volume. It is then restored to its original volume by the addition of glycerin.

Spengler and Pottenger find that preparations made from the bovine bacillus are much less toxic for human infections than those of the human bacillus, and at the same time they find them more active in their stimulation of the machinery of immunization as is shown by their power to increase the specific agglutinins of the blood. There are many other preparations that are more or less well known, viz.: Antiphthisin (Klebs), the water extract of tubercle bacilli (Von Ruck), Hunter's modification of old tuberculin, Beranek's tuberculin, Von Behring's tulase and many others.

#### CHOICE OF TUBERCULIN.

Of the four forms of tuberculin mostly in use today are the Koch's New Tuberculin, T. R., B. E., O. T., and the (B. F.) of Deny's with bovine tuberculin rapidly gaining It would seem theoretically that the B. E. would be able to produce the greatest amount of anti-bacterial immunity, while Deny's tuberculin, "B. F.," appears to be best suited for the production of an anti-toxin immunity. This tuberculin contains the products of the tubercle bacilli distintegrating during the growth of the culture. as well as the unchanged products of the tubercle bacillus given off in its growth. It is less toxic than the Koch's, Old Tuberculin, "O. T.," and undoubtedly possesses immunizing properties which are destroyed in the "O. T.," as a result of the prolonged heating to which it is subjected. The Bacillen Emulsion does not represent the products of bacterial action such as found in the "O. T." and "B. F.," and therefore to my mind is one of the reasons why it should not be solely used in the treatment of tuberculosis. Again, it is slow in its absorption and will cause many more general and local reactions as compared to the Bouillon Filtrate. "B. F." Up to two years ago I have used only the "B. E." and "B. F." in equal parts. Since that time I have employed the following combination: (1) B. E., (2) T. R., (3) B. F., (4) O. T., and in addition to this two bovine forms of tuberculin, viz.: B. E., and B. F. As will be seen there are six forms of tuberculins that are used in equal

proportions. This combination is undoubtedly the ideal therapeutic agent to be used for the treatment of tuberculosis. By far better results have been obtained by this combination than by the employment of any single type of any tuberculin on the market. The combination of the six tuberculins represents as near as possible what actually takes place in an individual recovering from tuberculosis. This mixture would combine whatever immunizing properties that exist in either the tubercle bacillus or the culture fluid.

#### ACTION OF TUBERCULIN.

Whenever a cure of tuberculosis takes place it consists in establishing upon the part of the infected individual an immunity to the tubercle bacillus and its toxins. terial diseases depend for their recovery upon the favorable action of the machinery of immunization. A cure of diseases from bacterial origin may be considered synonymous with immunity. This immunity may be ever so transitory as is noted after pneumonia, or somewhat more lasting as is observed following diphtheria, or it may be quite permanent as we find it after yellow fever, smallpox, etc. When the body tissues are invaded by specific micro-organisms a struggle for mastery ensues. The anti-bodies which are normally found in the tissues destroy some of the invading bacteria liberating endotoxins, etc., which in turn stimulate the body cells to the formation of more anti-bodies. In other words, any toxin which, when introduced into the organism, has the power of stimulating the system to the production of anti-bodies which are for their particular poison. The ultimate outcome of the battle between the bacteria and the body cells of the individual depends upon the number or virulence of the bacteria on the one hand and upon the capability of the body cells to respond to the stimulation on the other. The anti-bodies found in an animal as a result of the recovery of an infectious disease are of several different kinds, viz.: Agglutinins, Opsonins,

Ferments, Antitoxins, precipitins, stimulins and coagulins, have thus far been studied and there may be still others as yet undiscovered.

It is manifestly important to know that these specific anti-bodies above noted can be produced in many diseases by the inoculation of bacteria which have been killed at their minimum thermal death point. The anti-bodies are formed as a result of injecting a certain type of bacteria which are specific for that particular micro-organisms. Thus typhoid bacilli cause typhoid anti-bodies; Staphylococci produce Staphylococci Antibodies and tubercle bacilli ("Bacillen Emulsion and products) manufacture anti-bodies for the tubercle bacillus. So the use of tuerculin is based on the principles of artificial protection, and it is our desire to obtain an over-production of anti-bodies in order to build a defensive armament against which the tubercle bacillus and its ravages will be impotent.

In tuberculin therapy we propose to produce an active immunization. To establish such an immunity it is absolutely imperative that the toxins (tuberculins), act with regularly progressive intensity on those groups of cells which produce toxin immunity. Stimulations of a slight or stationary nature are not sufficient to set in motion the machinery of immunization. It has been shown by Roux and Von Behring that properly spaced, many small increasing stimulations are of greater import than one large stimu-Likewise Trudeau affirms that infinitesimal doses of tuberculin, methodically increased, which produce only slight stimulation of the defensive resources of the organism, result in a well marked toxin immunity, as shown by increased toleration to large doses of toxin, while large doses are too rapid and an increase may bring about anaphylaxis or hypersuscpetibility, and an aggravation of all the symptoms of the disease. By the inability to control the liberation of toxins (tuberculin) manufactured in the body of a tuberculous subject, accounts for the failure in many cases to effect a complete cure. If the tuberculosis foci are liberating large doses of the toxins at irregular intervals over an extended period nothing but disaster could ultimately result to that individual. Ringer states that, "while the baccilli are mainly responsible for the local conditions in the lungs, the toxins are the cause of the emaciation, the loss of strength, the febrile temperature, the rapid heart action, the night sweats; in short, the constitutional manifestations. The origin of this toxemia of tuberculosis can be accounted for only by the assumption that the toxins and soluble proteids manufactured at the site of the bacillary invasion are taken into the blood and lymph streams and carried to all parts of the body."

#### CLINICAL RESULTS.

The final test of all remedies must be clinical results. Theoretically there are many measures that are lauded to the skies, but when they come to the practical application prove dismal failures. This is not so with tuberculin. has withstood the test of time. Enormous amounts of literature coming from masters in this country, in England, and on the continent are lending willing testimony to its inestimable value. Many comparative tables are daily noticed in the various journals showing the benefit derived as a result of tuberculin administration, as compared with the untreated patients subjected to identical environments, In the Johns Hopkins Tuberculosis Dispensary, conducted by Hammand and Wolman, in which they recently report that they have had fifty-seven cases of pulmonary tuberculosis on tuberculin treatment (T. R. and B. F.) for at least ninety days with the following results: tients were apparently cured, in sixteen the disease arrested, twelve were improved, in eighteen the disease was progressive and one died. In selecting the cases the stage or the extent of the disease is not considered. In the outpatient department of the Massachusetts General Hospital.

Boston Consumptives' Hospital, and the Good Samaritan Day Camp, tuberculin treatment was given the dispensary patients under the supervision of Drs. Hawes and Floyd. They report that out of 143 tuberculosis patients treated with tuberculin (B. E. and B. F.) during the past four years, nineteen have died, sixteen have shown no improvement, while 108 have been benefitted to a greater or less degree. They claim that in no instance have they been able to see that tuberculin has done the slightest harm; reactions have been rare and invariably of a very mild type. In incipient pulmonary tuberculosis they regard tuberculin as a factor in increasing body resistance, and in maintaining this resistance so as to prevent relapses. In more advanced pulmonary disease tuberculin will often alleviate distressing symptoms, prolong life and occasionally help to arrest the process. In localized or "surgical" tuberculosis, tuberculin has a marked beneficial effect. They conclude by saying that dispensary patients can be treated with tuberculin not only with perfect safety, but with distinct benefit, providing that there is a close personal co-operation between patient and physician. Of course, it goes without saying that the out-door, hygienic, dietectic, etc., regime was rigidly adhered to. An interesting article by Lawrason Brown emphasizing early treatment of tuberculosis, appears in the New York Medical Journal, November 20, 1909. compiled the ultimate results obtained at the Adirondack Cottage Sanitarium, covering twenty-two years. that the records show that 52 per cent of the patients in an incipient stage, 25 per cent of the moderately advanced, and less than 2 per cent of those in the far-advanced stages are alive. In other words, a patient in the incipient stage has at least twenty-six times as good a chance of permanent recovery as one in the far-advanced stage. He says that not every patient with tuberculosis will recover, no matter how early his case is diagnosticated, and no matter how soon put under the most approved treatment. But in an

early case a patient has twenty-six times better chances for permanent recovery than a late one.

#### PERMANENCY OF RESULTS.

The question of paramount importance to all patients after they have been apparently cured is whether or not they will remain cured. It is mainfestly apparent that the results obtained in tuberculin treated cases are more permanent than in those treated without it. Patients who get well without treatment or with the usual open-air hygienic. dietetic treatment, are more apt to have a quiescence rather than a cure. This is shown by the fact that many of them will still react to tuberculin, which they would not do if they were cured, and also by the fact that a greater percentage of those suffer relapses than of tuberculin treated cases. (Pottenger, p. 203). Trudeau, who has used tuberculin over a longer period of time in more cases and more conservatively than any other man in these United States. discusses the post-discharge mortality between patients treated and those that were untreated with tuberculin at the Saranac Lake Sanitorium. He says that 18 per cent more of the treated incipient cases are living than those of the untreated, while 25 per cent more of the advanced cases who received tuberculin are living than those who did not. In effecting a cure the struggle for mastery is essentially a local one. Lymphocytes are prominent in the formation of the tubercule, and the wandering leukocytes participate together with connective tissue cells in localizing bacilli. If the organism is successful in effectually localizing the tubercle bacilli, a more or less rapid process of disintegration or bacteriolysis ensues which destroys the bacillus and diposes of its products. On the other hand, in the so-called arrested cases where complete recovery has not taken place we find that in the center of the tubercle a great many cells have died in consequence of the direct and prolonged exposure to the toxin, and caseation of greater or less

degree is the common result. This caseated material really protects the enclosed bacilli from further lytic action by the living cells. Owing to the restricted action of the pent up tuberculin toxin, the body cells not composing the tubercle fail to get the proper stimulus to resist its action when the constitutional condition is in a favorable state for this. This fact forms the chief rationale for specific therapy in tuberculosis by tuberculins, for it is desirable to impress the whole organism with the specific stimulus in sufficient quantities and at proper intervals to maintain a high resistance (E. R. Baldwin). If tuberculin were not used in these arrested cases you will be apt to find the fire still smouldering, sooner or later to break out into a serious conflagration. The pent-up toxins in the tubercles are now at the mercy of the non-immunized body cells. Any immunity now that results often comes too late to be efficacious in saving life. By the employment of properly spaced doses of tuberculin in these cases there results a local stimulation of the tuberculosis foci (tubercles) which shows itself as a hyperemia, thereby causing more blood to be sent to the part and consequently new protective substances are brought to bear upon the bacilli in the foci of infection. The area of infection previously lacking in vascularity is not only flooded with a greater amount of blood, but with a blood whose immunizing properties have been greatly increased. Again. tuberculin does another thing, and that is it produces a more rapid formation of fibrous tissue around the foci of infection. The irritation caused by the local reaction on the tubercle is responsible for this fibrous tissue change. From this we can readily understand that the addition of tuberculin treatment must not only increase the chances of cure, but must enable this result to be produced in a shorter time.

#### RESULTS DUE SOLELY TO TUBERCULIN.

The most convincing results as to the efficacy of the use of tuberculin comes from Bonney, of Colorado. He selected

forty-two cases of chronic pulmonary tuberculosis without symptoms referable to mixed infection. It was recognized that all patients should represent, if possible, the same general type and stage of the disease, and conform more or less closely to a fixed regime. It seemed highly desirable that there should be eliminated all sources of confusion arising from climatic influence or change of environment. To this end patients included in this group were selected with extreme care. In view of the uncertainties attending its employement, no individual was permitted to undergo the treatment, whose general condition of previous progress had been entirely satisfactory, or who exhibited appreciable temperature elevation. On the other hand, an effort was made in the selection of cases to include only those who, in spite of a continued residence in Colorado under appropriate conditions of daily life, had failed to secure an entire arrest of the tuberculous process-It was believed that more definite information concerning the effect of the treatment could be secured by limiting its application to those whose condition had been almost stationary for prolonged periods. Of all the cases comprising this group, the average period of residence in Colorado, with practically unchanged environment, was two years and eleven months, the longest being ten and one-half years, the shortest six months. A remaining activity of the tuberculosis process was present in all cases as evidenced by physical signs: cough, expectoration and bacilli. A new method of treatment was hailed with enthusiasm by these patients as precursory of possible future recovery, this introducing a psychic element impossible of elimination. In summing up he says, that in no instance has he been able to detect permanent injury from the treatment. On the other hand, conspicuous improvements have been noticed in some cases. In the majority of cases demonstrable progress has been established, but it is probable that in some cases the psychic element has been a factor of considerable importance.

A number of cases showed a material diminution of cough, and sometimes its complete cessation. The sputum has been markedly lessened in many cases. In a few instances a conspicuous diminution of bacilli has been noted several months after the inauguration of this treat-A gain in weight has been exhibited by seevral patients whose previous efforts in this direction had proven unavailing. In no case has there been a loss of nutrition. Of the forty-two cases, he reports in detail ten cases showing marked improvement. Of the remaining thirty-two in this group, fifteen may be said to have exhibited some favorable effect from the administration of the remedy. twleve there was no appreciable influence properly attributable to the tuberculin. Five exhibited an increase of cough and expectoration after each injection, to such an extent that the tuberculin was suspended after three or four doses.

#### SHOULD TUBERCULIN BE USED ON A PATIENT WITH FEVER.

Pottenger is authority for the statement that a slight rise of temperature, due to the tuberculous process which does not exceed 101 degrees is best combatted by a combination of the open-air, hygienic and tuberculin treatment. He says that it is not an uncommon experience to find a rise in temperature of this kind which has persisted for some time, yield in short period to injections of minute doses of tuberculin.

Krause has recently obtained excellent results from the administration of tuberculin to febrile patients. He reports a permanent disappearance of the fever in all cases, and suggests at least a tentative administration of the remedy among a few patients who have resisted all other measures.

Bonney, of Denver, had quite recently had occasion to employ the tuberculin in six cases exhibiting persisting fever of from 102 degrees to 103 degrees F. daily, despite prolonged rest in bed in the open air. In three cases no appreciable effects were noted, in one the temperature receded within a few days to normal and has remained so for four weeks, in two cases the temperature has gradually receded to the neighborhood of 99 degrees F. That such injections act beneficially I have been able to prove to my satisfaction for the past few years. Repeatedly have I seen such temperature yield to this treatment when they had refused to yield until tuberculin was given.

Theoretically the above contention seems unreasonable, for it is generally believed that the fever is due to the system's being surcharged with toxins from the tubercle bacillus; and it would seem that to inject more toxins would be only adding fuel to the fire. Professor Wright offers us an explanation of this action. He says that not infrequently the machinery of immunization fails to work to its full capacity in spite of the fact that toxins from the invading bacteria are being poured out into the blood streams. At such times vaccines injected into the tissues may stimulate the formation of protective bodies where those circulating in the blood have failed.

#### CONCLUSIONS.

- 1. The efficiency of tuberculin as a therapeutic agent has been proved to such a degree that it has passed beyond the pale of controversy.
- 2. Its administration should always be combined with rest, hygienic, outdoor treatment and in the vast majority of instances should be subservient to this.
- 3. I am of the opinion that equal parts of the following (human) tuberculins, viz: (1) "B. E.," (2) "B.F.," (3) "O. T.," (4) "T. R." and (Bovine) tuberculins (5) "B. E.," (6) "B. F.," when combined, represent at the present time the ideal therapeutic agent for the treatment of tuberculosis; for the reason that the mixture would combine whatever immunizing properties that exist in any one of the six tuberculins.

- 4. Statistics show that more than twenty per cent more permanent cures have resulted when tuberculin has been employed than where it has been omitted. (Trudeau and Pottenger.)
- 5. Many patients running a slow, but steadily down hill course, in spite of hygienic, dietetic and open-air treatment, improve under tuberculin.

# NUGGETS FROM MINES DELVED IN. BY WILLIAM F. WAUGH, M. D., of Chicago, Ill.

"MORPHINE INCREASES the activity of the vagus to the heart, but sedates the fibres going to the gastrointestinal system."—W. M. Kraus, *Medical Record*.

"MORPHINE checks all secretions except sweat; sedates all smooth muscle fibre except the eye and bladder sphincters."—Kraus, *Medical Record*.

NICOLL (Med. Record) says: Tetanus is usually treated now by magnesium sulphate, phenol by Baccelli's method, and antitoxin. Bad results were due to late treatment and too small doses.

"ARTHRITIS DEFORMANSS:—The majority of observers and investigators now believe this disease infectious. Baking is very beneficial."—S. W. Boorstein, Med. Record.

"GONORRHEAL ARTHRITIS: Macy (Med. Record) employed pituitary extract in three cases, with speedy improvement and rapid cure."

"WOUNDS:—Warm disinfectants are more bactericidal than cool ones. Local infections do best with phenol 4%, at once removed by irrigation. H<sub>2</sub>O is one of the best."—Von Herff, *Muench. Med. Woch.* 

THE MEDICAL RECORD is one journal that does not conform to the ideal that "to be truly scientific the element of utility must be eliminated. Every number contains matter of too much practical value to be overlooked.

GOOD INSECT POWDER should contain 2000 pollen grains for each milligram—count 'em.

SCHNETZ ADDED SALT to the milk diet of patients with persistent fever, with brilliant results. Patients at once began to feel better and develop appetite."—Med. Record.

"Intra-neural alcohol injections destroy motor as well as sensory nerve fibers, but regeneration and restored function may ensue."—Med. Record.

WOODRUFF STUDYING the appalling rapidity of tuberculosis in our soldiers in the Philippines, concludes that any radical change in climate finds a person less capable of resisting the disease. Brunettes withstand the tropic sun better than blondes.—Med. Record.

IF A COUNTRY ROOTS OUT every man who has brains to think and courage to speak, she is not apt to cut much figure in war. Something more is needed than masses of men even if armed and disciplined.

THE MENOPANSE and the development of cancer have been associated too emphatically by teachers. Of seventy uterine cancers 35% developed in women under forty.—H. A. Duncan, *Med. World*.

CANCER usually beginning above the anorectal line, which has no direct spinal innervation, may reach an advanced stage without acute or painful symptoms—Martin, *Med. World*.

MAN DEVELOPING from the tree-climbing ape, is by inheritance a creature of shade rather than sunshine.—Waugh, Med. World.

DEBILITY.—It may be an infection pouring toxins into the blood, or a leakage of nervous force somewhere. Sexual excess? Curved spine? Bad eyes? Bad hygiene?—Waugh, Med. World.

J.C. CALHOUN (*Med. World*) says: "Intravenous injection of quinine is very little trouble and gives quicker and better results than oral dosing with no sequels."

NATURALLY JEWISH PHYSICIANS advocate circumcision, but we would like to hear from others. Is it really advisable? (By all means—unquestionably so.— $Ed.\ S.\ P.$ )

FOR SCARLATINAL DROPSY with scanty urine, but no fever, Widerhofer suggested squill, ½ to 1 mimm. of tincture.

GASTRIC VERTIGOS—Magnesia calc., gr. V, creta prep., sodium bicarb., aa. gr. ij., nux vomica pulv. gr. 1-20, belladonna rad. gr. 1-30.; take after each meal—Riforma Medica.

ORCHITIS SUBSIDES SWIFTLY under applications of silver nitrate, 25%, but a cream of bismuth subnit, in water, does about as well and doesn't make the skin sore.— Med. World.

IN MENTAL DERANGEMENT with high blood pressure, Thomson had to give 180 drops of 10% acconite and add veratrum to secure relaxation. Marked improvement ensued.—Am. Jour. Med. Sci.

WE CANNOT QUITE DECIDE whether to start out as a rectal specialist, a treater of inoperable cancer, operate a tuber-culosis sanatorium, or go into farming. Which do you say?

WERE YOU TO ADOPT FARMING, would you specialize on alfalfa, pigs, Orpingtons, skunks, guinea pigs, or terrapin? Then there are Belgian hares, Angora goats, Persian cats, squabs, frogs and rattlesnakes.

DOCTOR, CAN YOU REALLY take yourself seriously when witnessing the popularity of osteopathy, Christian Science, Naprapathy, surgery, et id omme genus?

THE PHYSICIAN, HIS SPIRIT FULL of lofty ideals, his heart swelling with altruism, his brain crammed with professional lore, sits in his lonely office and gazes at the crowds thronging to stuff the quack's pockets with gold. Oh, what's the use!

INTESTINAL STASIS, causing alimentary toxemia and absorption of chemic poisons and bacteria into the blood, may

be the cause of gout and rheumatism—Med. Press and Circular.

HEMMETER CONDEMNS cancer autolysates as based on supposed cures of rat tumors, of which many subside spontaneously.—Med. Record.

THE NATIONAL ASSOCIATION for the Study and Prevention of Tuberculosis advises patients without at least \$1,000 not to go West to build new homes. Climate is not worth so much as proper care and food.

THE EQUIVALENT of an entire army corps has thus far suffered from venereal diseases, says the Berlin klin. Wochenschrift.

THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER urges state society meetings to spread knowledge of the diseases. But the only advice as yet given is to have cases operated on even before the cancer has developed.

THE NEWS (?) PAPERS revive the tale of dog-fat curing consumption. We knew a druggist who had many customers for dog-fat, in which they had faith. In fact, he had to buy his lard oil by the barrel to supply the demand.

ONCE THE PHYSICIAN put all the plausible hints on therapeutics he picked up in a scrap book. Nowadays he relegates them to the scrapheap.

URIC ACID, a seneless bogey, badly designed by sad and silly herbivora to frighten the active and careless carnivora.

Med. Press and Circular.

RHEUMATISM has nothing to do with chorea, tonsillitis, subcutaneous nodules or erythema nodosum.—Med. Press and Circular.

GREAT EATERS are liable to gout, and of these the costive more especially.—Sydenham.

CAMPANI finds that a valuable prognostic may be obtained in consumptives by noting the degree of reaction following the application of croton oil to the skin. The greater the vital resistance to the disease, the more pronounced will be the reaction.—Medical Record.

### SOME HISTORY AND SOME DEDUCTIONS FROM OB-SERVATIONS ON TYPHOID FEVER.

BY DR. E. H. SHOLL.

### Birmingham, Ala.

I am the oldest active practitioner of medicine in the State of Alabama, having graduated at the Pennsylvania Medical College on W. Ninth St., March 6, 1866. It was an adjunct to the Lutheran College at Gettysburg. Its faculty was at that time unsurpassed in the city or land.

Dr. Alfred Stille was Professor of Medicine.

Dr. J. B. Biddle, Professor of Materia Medica.

Dr. Franics Gurney Smith, Professor of Physiology.

Dr. David Gilbert, Professor of Obstetrics.

Dr. John Neill, Professor of Surgery.

Dr. Jonathan Allen, Professor of Anatomy.

Dr. J. Aitkin Meigs, Assistant Professor of Physiology.

Dr. Gobrecht, Assistant Professor of Surgery.

A galaxy of talent unsurpassed in its day. Here I wish to follow with some deductions that run counter to the generally accepted opinions in reference to the management of typhoid fever. This is the result of accurate observation of 404 cases in private practice, besides many seen in several years work in hospital service.

I have found it as a rule, with few exceptions, that where I could get the loose bowels under control and keep them so, that my patients went on to recovery. The first test was in the case of a young lady, Miss Lizzie Bell, of Warsaw, Ala., October 16. The bowels had been very loose with exhausting discharges. I got them under control and kept them so. On the 16th day she said to her mother, "I belive that Dr. Sholl has locked up my bowels and thrown away the key." Soon after that they moved and she went on to a happy recovery. Another similar case, bowels closed for sixteen days, went on to recovery. Another case where they had been closed for twenty-four days after hemorrhage recovered. The theory is simply this: the inflamed

glands are kept from irritation and given time to heal. The last twenty-nine adult cases I have treated with 1-16 grain of bichloride of mercury every two hours, all recovered. Added to this twenty drops of specific tincture of echinaccea and you with almost absolute certainty alleviate the course of this trying and very dangerous disease. I hope these brief statements may throw light on the way of some troubled doctor.

# Beconds, Begollections and Beminiscences.

### ANNUAL MEETING OF THE ASSOCIATION OF MED-ICAL OFFICERS OF THE ARMY AND NAVY OF THE CONFEDERACY.

BY A. A. LYON, M. D., OF NASHVILLE, TENN.

The association was convened in its eighteenth annual session at Richmond, Va., and in the Library Hall of the Jefferson Hotel at 7:30 P. M., June 2, 1915.

The attendance was not large, but proved earnest and active. There were present an unusual number of former presidents and other officers of the association. Among them Drs. John R. Gildersleeve, Virginia, 1914; S. E. Lewis, District of Columbia, 1908; E. D. Newton, Georgia, 1911, and A. A. Lyon, Tennessee (present incumbent). Also Dr. Carroll Kendrick, Mississippi, Vice-President, who, exofficio presided over the meeting in Macon, Ga., 1912, due to the death in the preceding January of Dr. W. F. Beard, Kentucky, the President-elect.

Dr. S. H. Ragan, of Missouri, the Recording Secretary, was absent on account of illness, and Dr. S. E. Lewis was designated to act as Secretary pro tem.

The President, Dr. A. A. Lyon, called the meeting to order, and in lieu of the customary President's formal address, briefly presented a historical epitome of the association, together with the conditions now confronting, and

setting forth his conception of duties yet developing upon us.

Substantially he said as follows: "It is familiar to all of you that the destruction of the Surgeon General's Office by fire, April 2, 1865, in an hour swept away, practically, all of the accumulated medical and surgical records of the Confederate Army.

In order as far as possible to substitute these lost records, an association was organized in Atlanta, Ga., May 20, 1874, in pursuance of a cicular letter issued by Dr. Edwin D. Newton, of Atlanta, Ga., about thirty Surgeons and Assistant Surgeons attending, its membership consisting of men who had actually served in the medical department of the army and navy of the Confederate States. Dr. S. H. Stout was the chairman of this meeting.

At this meeting Dr. Samuel P. Moore, late Surgeon-General of the Confederate Armies, was elected President with Henry F. Campbell, of Georgia, Vice-President from the Confederate States at large, with prominent surgeons from other Southern States also as Vice-Presidents; Dr. S. H. Stout, Secretary, and Dr. E. D. Newton, Treasurer.

At the second meeting held in Richmond, Va., October 19 and 20, 1875, Dr. S. P. Moore presided and delivered a most excellent address dealing with important methods and measures of the Medical Staff of the C. S. A. during the four eventful years of its existence. This was published in full in *The Southern Practitioner*, Vol. XXI., October, 1909, pp. 491-498. At this meeting Dr. Hunter McGuire, of Virginia, Medical Director of Stonewall Jackson's Corps, was elected President., but owing to his ill health during the succeeding year or more, and the very limited attendance on the second meeting, no other meeting of the original association was ever held.

At the second reunion of the United Confederate Veterans, held in Chattanooga, in 1890, Dr. Joseph Jones of Louisiana, made a very earnest effort to organize the Med-

ical Officers of the Confederate Armies, and an assemblage of those in attendance was called to order by Dr. G. W. Drake, then Medical Director of the U. C. V., but only one meeting was held and no permanent organization was effected.

At the tenth annual reunion of the U. C. V., held in Atlanta, Ga., July 20, 1898, the Confederate Surgeons present, under a call from Dr. C. H. Tebault, Surgeon General U. C. V., by circular letter, met for the purpose of organization, about thirty being present. At this meeting Dr. J. B. Cowan, of Tennessee, was elected President, and the organization has been persistent from that time, with vary-degrees of sucess util the present, meeting annually at the same place and date with the United Confederate Veterans.

This conjunction of meetings proved an attractive feature in many respects, but for obvious reasons, also, proved very detrimental to the active development of our organization. The causes of this were very apparent, but cannot, within the limits of this article, be enlarged upon.

A moment's reflection will convince any one that the members of the army medical and surgical staff must be, without exception (all of them) old men today. Boys could shoot guns and wield sabers, but bearded men only could perform the grave duties of physicians and surgeons in 1861-65. The writer of these lines was the youngest full surgeon he ever met with in the army of North Virginia, and he has long since passed his allotted period of three score years and ten—indeed, he is much nearer the four-score mark. It is clear, therefore, that nearly all the makers of the medical and surgical history of the Confederate Army and Navy are now either in their graves or are too much debilitated by advanced years, to attend our meetings or further assist in the work originally indicated.

Some years ago were added to our membership Confederate soldiers who had become regular physicians since the war, designated as "associate members," and also regular

physicians, the sons of Confederate surgeons, designated as "junior members." This, with the hope that the mantles of their fathers would fall upon the shoulders of their sons. These associate and junior members had all of the privileges of the association, except eligibility for office. A number of these were very active and diligent members, and all of them delightful associates, but they, of course, had no medical or surgical army experience, and along this line could contribute nothing to the project for which we were originally organized.

As the legitimate result of these conditions, viz: the rapidly increasing mortality of the medical officers of the army etc., meetings, the past two or three years, had degenerated into virtual abortions, notably at Macon and Jackson-ville especially. Hence, the dissolution of the association or a radical change in its organization was recommended.

At the Brimingham meeting, in 1908, Dr. Samuel E. Lewis, of Washington City, in his presidential address, urged the erection of a monument to the memory of Surgeon General Moore, in the city of Richmond, and a resolution to that effect was adopted. This action has since been unanimously approved by the U. C. V. Association.

Monuments abound throughout the South to our generals and statesmen, to our private soldiers and to our women, but few, if any, to the medical heroes of the army.

Hence, it is now proposed to continue our organization—with some radical changes—including the admission of the younger element on a parity with their elders—and make them eligible to hold any office in the gift of the association.

This, in effect, led to a virtual abandonment of our history-collecting feature, and to the concentration of our energies toward the erection of the Moore Memorial. The very able services of Surgeon General Moore—in the face of very great difficulties—we all thought demand this recognition. The Medical and Surgical Staff also deserve it.

It should not be deemed invidious to claim that the doctors were the caretakers—the salvators, if I may use the term—of the men who fought and won the battles. Never in the history of nations were any soldiers so ably ministered to along this line as the Confederate Army, and for the simple reason that the ablest and most distinguished medical men of the South shut up their offices, went to the front and remained there to the end of the conflict; as the result, it is statistically proven, that the mortality in Southern hospitals and prisons was nine per cent, as over against twelve per cent in the Northern institutions, notwithstanding the infinitely better equipment in the North.

The question of this radical change was earnestly and intelligently discussed by most of the members present, and the conclusion as above outlined unanimously reached.

Dr. Dickey, Dr. George Ross, Confederate Veteran Surgeons, and Dr. John N. Upshur, a son of a Veteran, all residents of Richmond, were admitted to membership, together with several others who were present.

In the choice of officers, nominations and election was from the floor, and resulted as follows:

For President, Stewart McGuire, M. D., of Virginia; Jno. N. Upshur, M. D., of Virginia, Vice President; Samuel E. Lewis, M. D., of District of Columbia, Secretary and Treasurer.

Dr. Lewis was also appointed to formulate a system of provisional rules and regulations for the future government of the association.

After a most pleasant, harmonious and satisfactory conference, the meeting at midnight was adjourned.

A GENERATION OF MEDICAL MEN have subjected Cord. Ext. Ol. Morrhuæ Comj. (Hagee) to the most exacting clinical tests, and such tests show it to posssess nutritive properties of a high order. In view of the added advantage of palatability, it may well be said that Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is entitled to a front place among reconstructives. This latter feature adapts it particularly for administration to females and children.

# **E**ditorial.

#### A NATIONAL MEDICAL LICENSING BOARD.

Some thirty years ago, or nearabout, we advocated a "Medical Examining Board," to be composed of retired officers of the Medical Staff of the Army and Navy of the United States, whose fiat alone would give authority to practice medicine and surgery in each and every state in the Union. Among the arguments adduced were: (1) Such a board would be eminently competent; (2) Their long service in different localities would eliminate any sectional bias or affiliation; (3) The duties involved would not be overtaxing and the examination fees would be an acceptable addition to their retired pay, as well as a further recognition of their long service in behalf of their country.

We not only advocated this in the pages of this journal in the early '80's; but took it up personally with our Senators and Representatives in Congress, and right here met with opposition that we felt could not well be overcome. Senator Isham G. Harris, then with recognized ability and force with both political parties in our National Legislature, admitting that the measure possessed good points, was very positive that the question of "State's Rights" would render its adoption absolutely impossible, in which he was sustained by other colleagues.

The following editorial in our most excellent and valued contemporary, The N. Y., Medical Record of June 28 ult., which we reproduce in full, we most heartily endorse and commend, as it overcomes the political question above cited, and we sincerely hope and believe will at once be acceptable to a majority of the State Boards, and very soon after being tried will meet with the hearty acquiescence of nearly all, if not all of thm:

"For many years, from the very beginning, in fact, of the movement for State medical examination and license, the inconveniences and evils of a State board have been recognized, but have been thought to be inseparable from the system itself. Our peculiar form of government, with its confederation of forty-eight largely independent republics, makes uniformity of laws dealing with domestic matters practically impossible. A man may be legally crazy in one state and sane in another; he may be lawfully married in one and an adulterer or a bigamist in another, and, if engaged in the practice of medicine, he may be an honorable physician in one and, in the eyes of the law, a quack in another. Many attempts have been made to induce the states to adopt uniform qualfications and to inaugurate a policy of genuine reciprocity, so that a legal practitioner in one state may be admitted to practice without further examination in another. But all such attempts have failed, of necessity, and all suggestions of a federal regulation have been silenced by the fact of the unconstitutionality of any such measures.

"The attempt is now about to be made, however, to establish a system of national licensure by grace of the states. In his presidential address before the American Medical Association, meeting in San Francisco, Dr. Rodman described the plan which is to be inaugurated in the autumn. According to this a national board of medical examiners, of which the Surgeons General of the United States Army, Navy, and Public Health Service, with representatives of the Confederation of State Boards of Examiners, the Association of American Medical Colleges, the American College of Surgeons, and the American Medical Association, will be members, will meet in Washington in October, to examine such candidates as may present themselves. There is no doubt that the man who succeeds in passing this examination will be fit to practice medicine in any state of the Union, but whether or not he will be allowed to do so will depend upon the will of the several state boards. Some of these are forbidden by law to admit anyone to practice without an examination, and in such cases a change in the law will be necessary if the plan of a national licensure is to become universally effective; in other states the boards have discretionary powers to grant licenses to practitioners from other states or countries without examination, and these, if they will, can at once give standing to the licentiates of the national board. In Canada there is a national board of examiners, as well as provincial boards, and the latter all accept the examination of the national board and recognize its licentiates. such unanimity will prevail at once in the case of all our states is hardly to be expected, but even if only twenty of the largest and most populous of them agree to the plan, the success of national licensure will be assured. No one who stops to consider the many

disadvantages of the diversity of our State medical license laws can help wishing this project every measure of success."

#### INTERSTATE SANITARY DISTRICTS.

Their Establishment by the Secertary of the Treasury in Connection

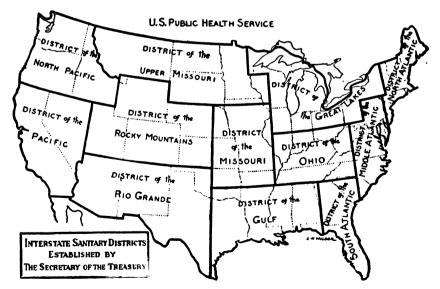
With the Enforcement of the Interstate Quartine

Laws and Regulations.

To facilitate the enforcement of the interstate quarantine laws and regulations the Secretary of the Treasury has divided the continental United States into districts to be known as interstate sanitary districts. The districts are as follows:

District of the North Atlantic.—That portion of the United States lying east of a line beginning at the junction of the seventy-fourth degree of longitude and the Canada line and extending southward to the forty-second degree of latitude and running west to the seventy-fifth degree of longitude, along which it extends south to the Atlantic Ocean.

District of the Middle Atlantic.—That portion of the United States lying west of the seventy-fifth degree of longitude and bounded on the north and west by a line beginning at the junction of the forty-second degree of latitude and the seventy-fifth degree of longitude and extending west to the seventy-eighth degree of longitude, thence



south to the fortieth degree of latitude, thence to the eightieth degree of longitude, and thence south to the Atlantic Ocean.

District of the South Atlantic.—That portion of the United States between the eightieth and eighty-fifth degrees of longtitude and south of the thirty-fifth degree of latitude.

District of the Gulf.—That portion of the United States lying between the eighty-fifth degree and ninety-eighth degree of longitude and south of the thirty-fifth degree of latitude.

District of the Ohio.—That portion of the United States lying between the eightieth and ninetieth degrees of longitude and the thirty-fifth and fortieth degrees of latitude.

District of the Great Lakes.—That portion of the United States lying north of a line beginning at the junction of the seventy-fourth degree of longitude and the Canada line, and extending south to the forty-second degree of latitude, west to the seventy-eighth degree of longitude, south to the fortieth degree of latitude, west to the ninetieth degree of longitude, north to the forty-sixth degree of latitude, west to the ninety-third degree of longitude, and north to the Canada line.

District of the Missouri.—That portion of the United States lying between the ninetieth and ninety-eighth degrees of longitude and the thirty-fifth and forty-third degrees of latitude.

District of the Upper Missouri.—That portion of the United States lying west of the sanitary district of the Great Lakes and north of a line beginning at the junction of the ninetieth degree of longitude and the forty-third degree of latitude, extending west to the eastern border of Wyoming, north to the southern boundary of the State of Montana, west to its western boundary, which it follows to the Canada line.

District of the Rocky Mountains.—The States of Wyoming, Utah, and Colorado, and that portion of the States of Nebraska and Kansas lying west of the ninety-eighth degree of longitude.

District of the Rio Grande.—The States of Arizona and New Mexico, and those portions of the States of Oklahoma and Texas lying west of the ninety-eighth degree of longitude.

The District of the Pacific—The States of California and Nevada.

District of the North Pacific—The States of Washington, Oregon, and Idaho.

TROPHONINE contains the nucleo-albumins and nucleo-proteids, is a most excellent form of concentrated nourishment, and is of great value in wasting disease, acute or chronic. The weakened stomach, easily and with least exertion readily absorbs and assimilates it.

#### AMERICAN MEDICAL ASSOCIATION.

The sixty-fifth annual meeting of the Association was held in San Francisco the latter part of June with both the retiring president, Dr. Victor C. Vaughan, and the president-elect, Dr. Wm. L. Rodman, in attendance. About 250 papers were read in the various sections. It was announced that the fellowship of the association on May 1, 1915, was 42,366. Among the questions which came up for discussion was the establishment of a National Board of Medical Examiners, which it was stated had been organized and would hold examinations in Washington, in October. The requirements will last for a longer time and the fee will be larger than that charged by the various states.

Officers of the association elected at this meeting are: Presidentelect, Surgeon General Rupert Blue, U. S. P. H. S., Washington; Vice Presidents, Drs. Albert Vander Veer, Albany, N. Y.; Geo. B. Evans, Dayton, O.; Donald Campbell, Butte, Mont., and Herbert C. Moffitt, San Francisco. Drs. Alex. R. Craig and Wm. A. Pusey, of Chicago (were re-elected to their offices as Secretary and Treasurer. Dr. W. D. Haggard, of Nashville, is a member of the Council on Education.

The work of the Scientific Assembly—the sections—was good. The programs were excellent, most of the meetings were fairly well attended, and interest was manifested in the papers presented and discussed. The Scientific Exhibit, as always, commanded the interest of the fellows; not only the excellence of the work displayed, but also its practical value to the profession and the clear demontrations made by those who contributed were frequently commended. The Commercial Exhibit was most creditable and fully deserved the interest manifested by those who visited the booths of the exhibitors. The social events were well planned and carried out. were the excursions enjoyed by those who were able to take advantage of them. The exposition did not detract from the interest in the work of the association as might have been expected, but was always available whenever lesiure time permitted the fellows or their ladies to visit it. The members of the local profession exerted themselves with true California hospitality to provide for the comfort and pleasure of the visitors, and are to be congratulated on their conduct of the convention. The San Francisco Session was a great success, about 2,300 being in attendance. The next place of meeting (1916) is Detroit, Mich.

PANOPEPTONE:—Containing in an instantly available form the entire nutritive substances of beef and wheat, meets every scientific and practical requirement as a food for the sick, convalescent, invalid, etc.

THE HAY FEVER PROBLEM:—This is the time of year when the services of the physician are actively demanded by the victim of vasmotor rhinitis—a season dreaded not alone by the patient, but, not uncommonly, by his medical adviser as well. Particularly is this true of the latter if he has not kept abreast of modern ideas on the therapy of hay fever. In any event the disease is one that tries the patience and calls for the application of remedial agents that have been proved beyond peradventure. Happily there are a number of such agents from which the physician can choose-products that have passed the experimental stage and demonstrated their serviceability. We refer in this connection to some members of the Adrenalin family-Adrenalin Chloride Solution, Adrenalin Inhalant, Anesthone Cream, Anesthone Inhalant. These products, in all of which the isolated active principle of the suprarenal gland (Adrenalin) is an active constituent. have rendered long, efficient service in the treatment of hay fever, and one feels no hesitancy in heartily commending them.

Adrenalin Chloride Solution, which is perhaps more widely used than any other preparation in the treatment of hay fever, is sprayed into the nasal chambers and pharynx by means of a hand atomizer adapated for aqueous liquids, or it may be applied on a pledget of cotton. For the former purpose it is advisable to dilute the solution as marketed (1:1000) by the addition of four to five times its volume of physiologic salt solution.

Adrenalin Inhalant, which is a solution, in an aromatized neutral oil base, of the suprarenal active principle, is well adapted for vaporization and inhalation from an oil atomizer. Used as an adjunct to Adrenalin Chloride Solution, or independently, it gives good results, parts not accessible to other medication being readily reached by the medicated vapor. It should be diluted by the addition of three to four times its volume of olive oil.

Anesthone Cream was devised by Dr. J. E. Alberts, of The Hague, Holland. It contains Adrenalin and a harmless local anesthetic (para-amido-ethyl-benzoate), incorporated in a neutral ointment base, and is applied to the inside of the nostrils four or more times a day, the patient snuffing it well up after each application, the quantity required being in size about that of an ordinary pea. It affords a relief which continues for hours in many cases, a fact worth remembering when one considers the fleeting effect of most local anesthetics.

Anesthone Inhalant contains the same active ingredients as Anesthone Cream, but the proportion of Adrenalin is doubled (1:10,000). The ingredients are incorporated in an aromatized neutral oil base. It is sprayed into the nose, first being diluted with olive oil or liquid petrolatum.

Another agent which has been used with marked success in the treatment of hay fever is Mixed Infection Phylacogen. It is administered by hypodermic or intravenous injection. The initial dose should be small, a 2-Cc. dose subcutaneously or a ½-Cc. dose intravenously being suggested. Many physicians are of the opinion that the use of Mixed Infection Phylacogen marks a distinct advance in hay-fever therapy.

WARREN TRIENNIAL PRIZE, MASSACHUSETTS GENERAL HOSPITAL:—The Warren Triennial Prize was founded by the late Doctor J. Mason Warren in memory of his father, and his will provides that the accumulated interest of the fund shall be awarded every three years to the best dissertation considered worthy of a premium, on some subject in physiology, surgery or pathological anatomy; the abritrators being the Physicians and Surgeons of the Massachusetts General Hospital.

The subject for competition for the year 1916 is on "Some Special Subject in Physiology, Surgery or Pathology.

Dissertation must be in either the English, French or German languages, and must be typewritten and suitably bound, so as to be easly handled. Work that has been published previously will not be considered in competition. The name of the writer must be enclosed in a sealed envelope, on which must be written a motto corresponding with one on the accompanying dissertation.

Any clew given by the dissertation, or any action on the part of the writer which reveals his name before the award of the prize, will disqualify him from receiving the same.

The amount of the prize for the year 1916 will be \$500.

In case no dissertation is considered sufficiently meritorious, no award will be made. Dissertations will be received until April 14, 1916.

A high value will be placed on original work.—Frederic A. Washburn, Resident Physician, Mass. Genl. Hospital, Boston, Mass.

PARENCHYMATOUS NEPHRITIS WITH ASCITES:—A personal friend, for many years a subscriber to this and other Medical Journals, whose name we will give on request, sends the following "case report:" "Lady patient, age 45 years. December the first she contracted typhoid fever. I removed her to St. Mary's Hospital where she was given the usual tyhpoid treatment. She was ill for about four weeks and apparently made a good recovery. About three weeks after her removal home she developed Nephritis, which I believe to have been a sequel of the fever. The Cardio-Vascular symptoms were pronoun-

ed, difficult breathing, she was compelled to sit constantly, nausea, headache and marked general anasarca. Ascites was marked and at one time, I had about decided to tap. The Edema in the lower dorsal and lumber region were decidedly marked. The case was one of typical Parenchymatous Nephritis. She was put on a diet of skim milk and buttermilk with frequent broths, etc.; the internal treatment consisted of Anedemin every hour for three doses then every three hours. Temperature P. M., 102; pulse, 110 to 130. Although slight improvement was noticed from the start, marked results were not observed for three weeks afterward when all Edema disappeared, appetite returned and she proceeded to an uninterrupted recovery. She is at present enjoying good health. The urine analysis is quite normal and she is able to do her house work.

AN IDEAL HOT WEATHER TONIC:—When the mercury is ranging high in the "nineties," and your patients complain of loss of appetite, impaired digestion, nervous exhaustion, etc., you will find "Gray's Glycerine Tonic" of most inimitable value—"used in the State Hospital for the Insane at Utica, N. Y., during the many years that Dr. John P. Gray was superintendent (from the early fifties to the early eighties"), as stated in the Journal of the American Medical Association, July 10, 1915, page 189. That it was originated by Dr. Gray, we were personally informed by Dr. John H. Callender, more than thirty years ago, he then being superintendent of the Tennessee State Hospital for the Insane, and to whom we shall ever feel most grateful, on account of the many, many satisfactory clinical results thereby obtained during the intervening years—"Puckey's Bazoo" and the small perSimmons to the contrary notwithstanding.

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

LISTERINE, a SAFE, NON-POISONOUS, UNIRRITAING ANTISEPTIC SOLU-TION embodies a two-fold antiseptic effect, in that after the evaporation of its volatile constituents—thyme, eucalyptus, mentha, gaultheria and ethyl alcohol—a film of boracic and benzoic acids remains upon the surface to which Listerine has been applied, affording more prolonged antiseptic protection.

It is a trustworthy surgical dressing; it has no injurious effect upon the tissues in which the healing process is going on.

Listerine in proper dilution is useful in the treatment of abnormal conditions of the mucosa and forms a suitable wash, gargle or douche in catarrhal conditions of the nose and throat, and in teaspoonful doses will often afford relief in fermentative dyspepsia and is largely prescribed, with excellent results, in the various forms of diarrhoea occurring in infants and adults.

SECURE SLEEP:—Those physicians who are seeking for an effective and yet thoroughly safe agent to take the place of chloral, will find it in Pasadyne (Daniel). Pasadyne (Daniel) is merely a pure preparation of the concentrated tincture of passiflora incarnata, this distinctive name being given it simply to separate it from ordinary tinctures of passiflora. Pasadyne (Daniel) overcomes cerebral excitation and brings about refreshing sleep. The certainty and safety of Pasadyne make it an ideal soporific for use in typhoid and other grave infections. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Georgia.

GASTRIC AND INTESTINAL ANTISEPSIS:—Under the direction of the physician, *Glyco-Thymoline*, the alkaline antiseptic, has won many victories in the treatment of gastro-intestinal disorders.

Used internally and for colon flushing, it corrects acidity, auto-infection, and soothes inflamed membrane.

Do not use imitations, as they are frequently acid in reaction. Clinical reports from numerous and reliable sources have demonstrated the efficacy of this excellent preparation.

PROMOTION OF DR. LUCIUS P. BROWN:—Our Tennessee State Food and Drug Commissioner was awarded first place at the competitive examination held by the Civil Service Commission for the position of Director of the Bureau of Food Inspection in the Department of Health of the City of New York, and was accordingly appointed by the Board of Health, and has assumed the duties of his new appointment. Both he and the citizens of the great metropolis are to be congratulated. Our loss is their gain.

ANTIPHLOGISTINE is an all-year-round preparation; usually applied hot, but fully efficacious (as it comes from container) in all cutaneous irritations, erythemas, vesications from solar, vegetable or insect sources. Athletic directors (Medical) know Antiphlogistine.

## Selections

THE EYES AND MOVING PICTURES:—As to the effect of moving pictures upon the eves I have no clinical data and must therefore express myself purely from the standpoint of personal observation. The question as to what effect does the frequent observation of moving pictures have upon the eyes is very much like the question as to what effect does the eating of cabbage have upon the digestion. The answer of course is that it affects different individuals This same law holds true throughout in different ways. the realm of medicine. Medicine as yet is not an exact science and probably never will be, and for this reason we cannot lay down fixed rules to govern every individual. To say that cabbage is indigestible is not a true statement of the fact. It may be for one person, yet there are others for whom it is digestible.

The same is true of the effect of moving pictures upon the eyes. Each individual is a law unto himself and he must determine whether his eyes can stand this kind of amusement. To say that moving pictures are universally harmful to all eyes is certainly not correct, but that they are harmful to certain individuals must be admittedly true. As a proposition, knowing something of the mechanism of moving pictures, we must admit that they would certainly seem somewhat injurious to almost all eyes, but their effect varies according to the innate condition of the eye itself. Many people naturally have weak eyes, i. e., they are easily affected by the glare of lights, lachrymate on the slightest provocation, become red and congested easily and frequently have some uncorrected error of refraction. The

fact that certain people wear glasses is self-evident that their eyes are not normal. Such people must naturally be affected by the kaleidoscopic changes as one sees on the films of moving pictures.

Retinal irritation and retinal fatigue are certainly symptoms produced on a great many people who watch these The exercise of the retina might be compared to rapid contraction of the muscles in exercise. tinued and rapid contractions will soon lead to fatigue. There are a great many men who can smoke six or eight cigars a day without any injurious effect upon their physiical constitution and yet we know others who will be highly affected by the smoking of one. This principle holds true in the effect of moving pictures upon the eye. When a person realizes that his or her eyes are fatigued, burn, become red, water easily, ache and possibly have a dull frontal headache after watching a moving picture performance, it is rather indicative that to these people such amusements are injurious to the eyes. We must, however, take into consideration the presence of a vitiated atmosphere which is also productive of fatigue symptoms. If my advice was asked I should say "study well your own eye symptoms before and after witnessing a moving picture performance and your own symptoms will tell you whether or not the same is injurious to your eyes." As to the morals taught, in the large majority of cases they are not the places for a minister's son.—Dunbar Roy, M. D., of Atlanta, Ga., in N. Y. Med. Times.

VIBURNUM IN CRAMPS OF CHOLERA MORBUS:—Hayden's Viburnum Compound presents Viburnum Opulus and Dioscorea Villosa in their most refined and active state, and when given in hot water, it will be found as useful in the cramps of Cholera Morbus as it is in Dysmenorrhea. This excellent anti-spasmodic well deserves the trial in all conditions of cramps, anywhere in the body.—Critic and Guide, May, 1915.

HEADACHES:—Whether the headache be acute or chronic the diagnostician should take time to find out the cause if possible, not only that his therapy may not be of the hit or miss kind, but that he may direct his patient so that he may avoid future attacks. Probably more suffering is due to headaches than to any other cause and most of them could be prevented.

In chronic headaches, those which last for days and which may be recurrent one should think of Bright's disease, syphilis, of gout or "rheumatism" (or to put it more accurately, of metabolic disturbances due to bad heredity, nervous strain and faulty feeding) and to defects of the pelvic organs. The over-use of tobacco should not be forgotten nor lead poisoning. Meningitis and brain tumors may be suspected.

Headaches from eye-strain can be determined by the history and the ruling out of other causes. Correction of the optical difficulties prevents further returns, if this was the source. Headaches lasting longer than a few hours or a day, but to which the patient is not usually "subject," may accompany a cold in the head from the swelling of the mucous membranes of the nose or infection of the sinuses, or of the teeth.

It is easy enough to diagnose a headache. The patient makes the diagnosis himself. It is the business of the physician to make a diagnosis as to the cause, just as he determines whether a fever is due to malaria or typhoid—to find the origin of the headache he must usually look elsewhere than to the head, and the cause of the ache may keep them both hunting and guessing. He should do his hunting first. In an ache of a few hours' duration—an acute headache—the digestive organs, the eyes, general fatigue, or derangement of the temperature control are most likely to be the sources of the trouble. If the cause is at the upper end of the food canal it usually shows itself (and should be encouraged to show itself) by vomiting.

If there is constipation or the absorption farther down of toxic materials, there is unfortunately usually no such guiding sign. The intestine has, in fact, become too tolerant. If the upper end of the food tract is overloaded the face is usually flushed, and the pulse full and resistant; if the trouble is in the large intestine the opposite effects usually are seen.—Med. Herald.

TREATMENT OF SEPTIC WOUNDS:—A paper by F. W. Sumner, A. B., M. D., an Indian civil surgeon, on "Prevention and Treatment of Septic Wounds in Warfare," affords new and juicy food for thought. He offers the following with autogenous vaccines as an alternative. We quote:

"An animal's wound—granted he can get at it to lick it—and assuming that his general state of health is good—practically never becomes purulent. Why? From the first he licks it and then saliva with the toxins licked from the wound is swallowed; this results in anti-bodies being produced by his bodily tissues, being circulated in the wound and paralyzing and finally killing off all the organisms in the wound; aseptic healing of the wound occurs."

Following is his summary of directions:

- "1. No antiseptics to be placed on the wound.
- "2. Where possible, the wound to be placed at once in the mouth and sucked for five minutes every two hours, or oftener, for three days. Any foreign body to be taken out of the wound (bits of clothing, etc.) placed in the mouth and well chewed for five minutes. The saliva, juices, etc., from the wound or foreign body to be swallowed; the foreign body to be spat out.
- "3. Where the mouth of the wound is small and tends to close up, retaining the discharges, it must be kept open by inserting a few strands of cotton, thread, bit of bandage, etc., to act as a drain.
- "4. Where the wound is so situated that it cannot be placed in the mouth, take a piece of clean rag, dip in clean

drinking water, squeeze out as much water as possible, and apply this to the wound to soak up the discharges; after two hours, places this rag, after wiping up the wound with it, in the mouth, chew well for five minutes as above described; put on a similar piece of rag and repeat the process every two hours, being especially careful, where the wound is small, to take out the drain each time and chew it with the rag, and to put in a fresh drain at each dressing."—Cin. Lancet-Clinic.

CAN PNEUMONIA IN CHILDREN BE ABORTED?-Dr. T. Wood Clarke, of Utica, at the last meeting of the N. Y. State Medical Society, said that in spite of the investigations of a Cole and a Lamar, of Cruikshank, and of many others, pneumonia remained today as it was in the Middle Ages, a self-limited fever which must run its course. the present state of our knowledge one was justified in following any signpost which might seem to indicate a possible road to a specific medication of pneumonia. for this reason that he related his experience in Utica during the past two years which, though suggestive, was not convincing. He was called to see a case of pneumonia in a child where masterly inactivity was indicated, but where he knew a placebo must be given. Having some hexamethylenamine with him he decided that this would be as good as anything, and it might have some beneficial influence by excreting into the alveoli. He left a mixture containing two grains to the dram, a teaspoonful to be administered every two hours. The results were astonishing and he determined to try this agent again. After citing two typical cases, Dr. Clark said that during the past two years in every case of lobar pneumonia or bronchopneumonia he had pushed this agent to the limit and with but one exception the results had been gratifying. In every one of the thirtyodd cases of pneumonia in children in which he had used this drug, the temperature had begun to drop within a few hours and in from twenty-four to forty-eight hours the

patient was well. His early experience had convinced him that the use of this drug early in the disease had in a number of instances shortened the attack and he believed that the physicians of Utica and Central New York were converted to the idea that they were no longer justified in relying on "masterly inactivity" in pneumonia in children. He hoped that his confreres with large hospital services would give this drug a tryout.—Med. Record.

THE POPULAR DOCTOR:—Answers a call promptly.

Apologizes when late on his rounds.

Is hopeful, happy, clean and strong.

Makes a fuss over the children.

Has an easy, gracious manner.

Has a kindly, helpful telephone voice.

Never argues against home remedies.

Explains disease, its course and prognosis.

Never hurries in the sick room, but does all his hurrying outside.

Offends neither the modesty nor principles of his patients.

Treats every patient as though that were the only patient he ever had.

Knows no class distinction, but extends to women the deferential courtesy due her sex, whether he meets her in hovel or ballroom.

Invariably speaks to people on the street (albeit they are wearing a bandage the other doctor put on), and shows an interest in their afflictions.

Listens patiently and responsively to the detailing of symptoms, both real and imaginary, even though it be the tiresome wailing of the hypochondriac.

And, finally, the Popular Doctor is keen enough when a question arises to pretend that the patient is always right, never wrong. On this point "hangs all the law and the profits."—S. C. S., in The Bulletin, Blair County Medical Society.

RADIUM TREATMENT OF FIBROID TUMORS:—Dr. Howard A. Kelly, in a paper read on the above subject before the Southern Surgical and Gynecological Association, at Asheville, N. C., December, 1914, said that massive doses of radium applied within the uterus will either so completely cure or so far relieve all cases of fibroid tumors as to obviate all necessity for an operation.

In 36 out of the 37 cases here reported, radium has either caused the tumor to disappear or has so far reduced its size as to render it innocuous. In every case subjected to an intrauterine radiation, the hemorrhage has been controlled, and wherever it has been desirable, amenorrhea has been produced.

Such radium treatments, calling for from 300 to 500 mg. of radium element, only last a few hours and, as a rule, do not have to be repeated. Furthermore, they are without risk. Such a treatment is pre-eminently adapted to tumors in young women, where menstruation can sometimes be conserved, and in hemorrhage cases, especially where profound anemia is found.

Radium treatment does not preclude and in no wise complicates a surgical operation if it is thought best to do one later.—(Author's abstract.)—Va. Med. Semi-Monthly.

STRYCHNINE, IODINE, AND ARSENIC IN TYPHOID FEVER:—Vernier believes that this combination of drugs exerts a specific influence in typhoid fever. The strychnine is given in daily doses of 2 to 4 milligrams. The idoine and arsenic are administered together as follows:

R Solution of potassium arsenite (1 per cent), 1.5 grams.

Potassium iodide, 0.50 gram.

Tincture of iodine (10 per cent), 15 grams.

M. et Sig.: Six to 8 drops in milk every 3 hours, or 12 to 16 drops every 6 hours.—Journal de Medecine et de Chirurgie Pratiques.

DIAGNOSIS OF TYPHOID FEVER IN THE FIELD:—The necessity for a rapid and accurate diagnosis of typhoid fever at the front gives a good opportunity to estimate the value of the tests employed in civil and hospital practice. In the military supplement to the Muenchener medizinische Wochenschrift. December 8. Rhein announces his experience in 100 cases of this fever, and is so satisfied with urinary tests that he is silent as to serodiagnosis. Ehrlich's original diazo test is too complicated for employment here, but Weiss' modified diazo reaction is not open to this objection. To perform this the urine is so diluted that its color almost To this dilution (usually effected by adding from 2 to 3 parts of water) from 3 to 10 drops of a 1-1000 sol. of potassium permanganate are added. If the resulting reaction is positive, a distinct golden yellow coloration appears, due to oxidation of the urochromogen, a normal constituent of the urine. In negative outcome we see either no color change or a slight brownish coloration. all cases in which the old diazo reaction can be obtained the Weiss modification above described invariably holds good. In doubtful cases (of which there were 10 per cent), with the original diazo, the Weiss diazo was positive. The author believes that the latter resource can be still further simplified.—N. Y. Med. Record.

GLYCERIN IN BROMIDROSIS:—Under this title Benians (Lancet, Dec. 5, 1914) notes that bromidrosis, or offensive sweating, is usually limited to the soles of the feet and occurs most frequently during the hot months of the year, and that moreover it is highly resistant to treatment. In severe cases there is usually tenderness of the soles, and abrasions or blisters form readily. Benians has treated five cases, three of a mild type, associated with warm weather. These were completely relieved, whilst the treatment lasted, but relapsed when it was discontinued. The other two were in boys of fourteen and were of a severe type. The condition had persisted for some months in spite of ener-

getic measures taken to insure cleanliness and despite the continued application of drying and disinfectant powders. In both there were blisters and abrasions, and in both the condition was completely cured in the course of three days by the application of glycerin well spread over the soles and toes before the socks were put on, this being repeated each morning.—Therapeutic Gazette.

ARTIFICIAL PNEUMOTHORAX:—In diseases of the lung, not tuberculous in etiology, where the respiratory action and pulmonary tension interfere with recovery, artificial pneumothorax, with its collapse of lung and complete rest, has been curative. Reports in the literature of such cases as pulmonary abscesses, fetid bronchitis, painful pleura from malignant disease, and bronchiectases successfully treated, are becoming more frequent.

Artificial pneumothorax is not a specific cure for pulmonary tuberculosis. It is solely a mechanical measure to give rest to the affected organ, that the reparative work of Nature may not be hampered, and so permit the system more easily to get rid of the disease. It has failed to bring about a cure in many cases, while in many others, for whom no hope of improvement otherwise existed, it has produced wonderful results. The important work with it for us at the present time is the selection of proper cases and securing for them all those benefits which this measure can give.—Thos. A. McGoldrick, M.D., in Long Island Med. Jour.

TREATMENT OF BOILS:—C. W. Allen (New Orleans Med. and Surg. Jour.), who, after using a variety of remedies for furunculosis, including autogenous and stock vaccines, sulphur baths, carbolic acid injections and baker's yeast, all in his own person, finally resorted to dilute nitromuriatic acid, of which he took 10 to 15 drops in water after each meal. Within a few days he began to note improvement; the well-developed lesions soon disappeared and those in the process of development were quickly aborted.



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# Griginal Communications.

### CARDIOVASCULAR SYPHILIS.

BY W. A. OUGHTERSON, M.D., OF NASHVILLE, TENN.

It is difficult in many cases of syphilis of the internal organs to say whether the syphilitic process involves the vessels proper or the parenchymata of the organ. This is especially true of cerebro-spinal syphilis, as the symptoms of small gummata in the brain and those of obliterating syphilitic endarteritis are distinguished with much difficulty.

In the case of the large arteries, especially the thoracic aorta, recent studies have proven that syphilis plays a very important part in many pathological changes seen in this location. This is especially true of aneurism and disease of the aortic valves. Francis H. Walsh, of the British Army, found a history of syphilis in 66% of his cases of aneurism; Malinstein showed a history of 80%; Hamplin showed a history of 82%; Heller 85%; Pancini 85%. Some of these observers did not regard all aneurisms, even in syphiltic subjects, as due to syphilis, attributing some of them to degenerative changes due to typhoid, scarlet fever, pneumonia and erysipelas. Still other observers assigned

degenerative chanbes to lead, tobacco and other toxic substances.

Since the discovery of the spirochete of syphilis and the blood reactions which have thrown so much light on the diagnosis, it has been found that much higher precentages of aneurism are due to syphilis than those above quoted. It may be true, as some men contend, that even the direct history of syphilis together, with the presence of positive Wassermann reaction does not constitute absolute proof that syphilis is the only cause of aneurism. On the other hand I have never seen but one case of aneurism in which a syphilitic history or positive evidence of syphilis was not present. If the Wasermann test is to be taken as positive evidence, then the percentage of aneurism due to syphilis would be much higher and I believe had a Wassermann been made in the one case above mentioned with negative history, that also would have spoken for syphilis. spirochete of syphilis may be demonstrated in the aneurismal wall in a high per cent of cases: then, too, the pathological changes seen in syphilitic aneurism are so characteristic as to leave but little doubt as to cause. The process here is characteristic of syphilis seen anywhere productive, always producing a mesarteritis and so marked may the foci be in the adventitia and media that they are like Milliary gumma; the fatty and hyaline changes are very characteristic so that to my mind the pathological findings should leave but little doubt as to cause.

Since the days of Wassermann some investigators claim 98% of all aneurisms are syphilitic, and this I believe is not too high, notwithstanding we do have other causes, demonstrated by Thayer, of America, and by European investigators, that typhoid and other infections may bring about changes in the vessel walls that weaken their coats, and any excessive strain may produce aneurism at a weakened point. Then we have the mycotic form of aneurism; in the mycotic variety of aneurism septic emboli are carried into

the vasavasorum followed by small abscess, injuring one or more coats of the vessel, later producing aneurism by excessive muscular strain or prolonged high blood pressure. In this class of cases periarteritis is a marked feature with swelling and the pulsation may not appear until the subsidence of the swelling.

Fragments from a calcified vegetation may be swept away, lodge in the vasayasorum and produce aneurism. The following are some of the important features of syphilitic aneurism: it usually occurs in a person under forty, the ascending arch is most frequetly involved, angina pectoris may be an early symptom, aortic insufficiency is often associated with it, aneurisms are frequently multiple, several have been described—the small cup-shaped sacs on the ascending arch are nearly always syphilitic. other symptoms, gumma of the liver, bones and marked change in the peripheral arteries. I believe 95% of true aneurisms are syphilitic. Aneurism of the heart is frequently seen at post-mortem, rarely recognized by physical I am unable to say what percentage of cases of aneurism of the heart is caused by syphilis. The mortality from this phase of the disease is difficult to determine, in fact cardiovascular syphilis could be much more satisfactorily discussed from a standpoint of its bearing on longevity and economics, as death due directly to syphilis of any form is not common with our present methods of diagnosis and treatment, but indirectly the mortality is very The statistics on aneurism would indicate that aneurism is much more frequent in Great Britain than any other country; in 19,000 post-mortems in Vienna there were 230 cases of aneurism; in the same number of postmortems reported from Guy's Hospital, London, 325 cases; it is much commoner in the negro than in white men.

Changes in the heart in syphilis: I believe that luetic involvement of the heart and aorta is much more frequent and much more serious in its direct affect than internists

and syphilographers have noted in the past. In fifty cases studied by Brooks, the following changes were noted:—the visceral pericardium was diseased in twenty-eight of the He calls particular attention to opalescent patches of thickening which correspond to the perforating points of terminal arterials; this same condition may be observed resulting from other causes. The myocardium was found diseased to a serious degree in 44 cases, 88%; and true cardiac gummata in five, or 10%. Merck's report showed gumma in about the same proportion. The most frequent myocardial change was found to be an inflammatory process even up to 90%, according to different investigators, chiefly the late stages of syphilis. by small, round-celled infiltrations about the arteriols or by foci of fibrosis which is most likely due to round-celled infiltrations so characteristic of syphilis followed by fibrosis in all parts of the body; as a probable sequence of such changes cardiac aneurism was found in 6% of the cases. or localized areas of scar formation are frequently encountered; fibrosis is usually associated with other changes degenerative in character, acute purely degenerative changes, not unaccompanied by fibrosis, is not often met with. Seventy per cent of cases show marked changes in the coronary vessels to a relative greater grade than the general arterial change. This change has long since been recognized in syphilis; according to Brooks becomes an important factor in many cases before the secondary eruption appears well developed. According to the same authority the occurrence as well as the degree of coronary disease appears to correspond more or less to the activity of the disease rather than duration of infection. Age appears to play but little part in the determination of coronary disease in lues, ten percent below thirty; nine percent below forty years of age.

The type of coronary disease is variable, six percent coronary thrombosis resulted from an active primary endarteritis. The more frequent coronary changes appear to be according to Brooks, a fatty degeneration with endarteritis from the diseased vessel, and there spreads out into the myocardium all manner of changes. Granulomatous true myocarditis, fibrosis or necrosis the result of deficient nourishment, in some instances aneurism of the arch was found six months after the primary lesion.

The older writers turned attention to the heart, especially in later years of life following a syphilitic history. Since the true nature of the disease has become definitely known it has been demonstrated that changes of a serious nature occur in many cases of an aggressive onset during the secondary symptoms before the eruption becomes well established, irregularities of the heart's action may appear, exercise may produce intermittence, extra systoles and other disturbances of rhythm, rapid action is common under stress. A soft systolic murmur often appears in the mitral area; all the phenomena of cardiac deficiency as is seen in many febrile conditions may appear, such as that seen in typhoid, tonsillitis, rheumatism, septicemia.

In a few cases death has occurred and autopsies demonstrated these manifestations to be due to typical syphilitic inflammatory changes in the heart muscle or its arterials.

In one case reported by Brooks terminating fatally before the secondary rash had fully appeared or a diagnosis had been made, death immediately resulted from a minute perforation of the wall of the aorta just above the ring, a pronounced acute arteritis and periarteritis was found throughout the myocardium, particularly involving the vasavasorum of the aorta. Large foci of round celled infiltration with parenchymatous degeneration of the muscle cells and an active hyperplasia of the interstitial connective tissue, all typical and unmistakable syphilitic changes, yet they appeared in the early stages of the disease before secondary eruption was well established.

Grossman has made several observations of an identical nature. It seems to have been well demonstrated by others that specific inflammatory changes develop first in and about the arterioles of the heart muscle, so we must admit that serious changes do occur in the heart early in the disease.

I believe we are justified in taking the view that cardiac lesions can be expected in the earliest of all visceral lesions. If we are willing to accept the claims that such early changes do occur, know the unregenerative nature of heart muscle and the inevitable fibrotic changes which must follow in the wake of syphilis, it follows that the most active and vigorous treatment should be instituted the very moment a diagnosis has been made. Unfortunately the diagnosis based upon physical signs is attended with much difficulty in this as in other forms of myocardial change. The one reliable physical sign that is almost infallible is aortic insufficiency regardless of history or other evidence of syphilitic infection. It is true the aortic valves may become involved by other processes, but rarely seen in the absence of a history of rheumatism, tonsillitis or other acute infection, and when due to pyogenic infection there is almost invariably evidence of a mitral valve infection, the mitral valve rarely if ever being involved alone in syphilis; then the arterial change seen is aortic disease. The aortic cusps proper need not become involved in syphilis to give rise to all the phenomena of aortic regurgitation. Degenerative changes in the aortic ring may allow dilatation and the individual promptly die of aortic decompensation without valvular lesion. I saw two such cases in Cabot's Clinic, both of which were verified at post-mortem, and a diagnosis of aortic insufficiency made. Another common and early change generally fatal is the syphilitic aortitis with great change in the inner coat about two inches from the aortic cusps, with the characteristic round celled infiltration which gradually extends down until the cusps are involved, or it may extend over the orifice of both coronary arteries and produce sudden death and is seen chiefly on the convex surface of the arch. It can frequently be recognized by a systolic murmur at the base before the diastolic murmur is heard, even before aortic insufficiency occurs among the other early symptoms; irregularity more marked on straining or nervous apprehension, rapidity easily excited, pain and tenderness on heavy percussion over the pericardium, perhaps more frequently seen when dilatation occurs, or where there is extensive inflammation. On the other hand extensive change may exist with any of the above mentioned phenomena, therefore one can assume that cardiac changes of a serious nature are not present because of the absence of physical signs.

In late or tertiary syphilis, in the absence of aortic insufficiency, the symptoms are those of myocarditis; if there are murmurs present they are accentuated, irregularities and heart block as is seen in other forms of myocarditis, probably irregularity is the commonest finding in long standing cases of lues. In Brook's series of cases 75% showed endocarditis; no case showed involvement of the mitral ring alone.

The treatment needs no mention, except to say that no case with serious circulatory disturbance should be allowed to die where there is no plausible explanation for such disturbance without the benefit of antisyphilitic treatment.

Syphilis of the arteries: One might write a volume on this phase of syphilis and still leave the last word unsaid. It is conceded by all observers that syphilis is one of the most important factors in arteriosclerosis. The disease is so common, the causes so many and varied that a clinical diagnosis in many instances is difficult, but when we stop to consider that arteriosclerosis either directly or indirectly kills more people than all other diseases put together, then to concede that syphilis is one of the most important factors

in its production, we must concede that syphilis plays an important role in longevity if not in mortality. I have already taken up much time in a discussion of the heart, so I will close with a few passing remarks:—

First. Arteriosclerosis in a child is always syphilis.

Second. Arteriosclerosis in a young adult should always arouse a suspicion of syphilis.

Third. One-third of all cerebral hemorrhages are traceable to syphilis; Julius Grinker.

Fourth. Ninety-five per cent of all hemaplegias in a young man under forty are syphilis due to arterial changes.

Fifth. Cases of ocular palsies in young people should arouse suspicion.

Sixth. Cases of unsystematized changes in the cord in young persons should make us search for syphilis which may involve the nerve tissue proper or the vessels.

Time will not permit me to take up individual organs and consider their vascular changes, such as the stomach, bowels, liver, spleen, pancreas, lungs, and organs of reproduction.

Kidneys: The vessels of the kidneys are subject to the same changes as those elsewhere in the body; gummata frequently occur and are prone to be followed by cicatrix. Amyloid changes are frequent in old untreated cases and congenital cases; clinically the affection is not always easily recognizable.

Acute syphilitic nephritis occurs in the secondary stage in about four per cent of cases; may occur in from three to six months of the initial lesion, and the outlook is generally good if promptly treated, occasionally a chronic nephritis follows. Osler reports cases proving rapidly fatal. I do not know of any method of diagnosing syphilitic nephritis except by exclusion of other causes or the presence of other evidence of syphilis and therapeutic test.

### AMERICAN PROCTOLOGIC SOCIETY.

Seventeenth Annual Meeting, held at San Francisco, Cal., June 21 and 22, 1915.

The President, Louis J. Krouse, M.D., Cincinnati, Ohio, in the Chair.

PRESIDENT'S ADDRESS, "RETROSPECT AND PROSPECT."

By Louis J. Krouse, M.D., of Cincinnati, Ohio.

Dr. Krouse stated that nearly two decades had now elapsed since the organization of the American Proctologic Society, and that he recalled distinctly the great enthusiasm manifested by the members at their first meeting.

He called attention to the fact that here is now a fair enrollment of Fellows from widely scattered parts of the United States.

He believes that the medical fraternity has still need of a society like the American Proctologic Society, whose field of activity is limited to ailments located in the anus, rectum, and colon. This is evidenced by how the general practitioner generally handles such cases, and by later referring them to the proctologist.

Dr. Krouse deplored the fact that the medical schools are so slow in establishing a chair of proctology, such as has been done in all of the important postgraduate schools of the country, where this important branch of surgery can be taught. He thinks, and advocates, that there should be a ward set aside in all the teaching hospitals where the student will be able to acquire a better knowledge of this specialty, and will then be better prepared to treat such cases intelligently.

Dr. Krouse said that he pointed with much pride to the fact that with one or two exceptions all the best text books by American authors on the subject of Diseases of the Anus, Rectum, and Colon, have been written by Fellows of the American Proctologic Society.

The following is an abstract of the principal papers:

A REPORT OF PROCTOLOGIC LITERATURE FROM MARCH, 1914, TO MARCH, 1915.

By Samuel T. Earle, M.D., of Baltimore, Md.

In this review of Proctologic Literature, Dr. Earle quotes freely from the following authors, giving the salient points from each of their papers:

Chas. H. Mayo, M.D., Rochester, Minn., (Surgery, Gynecology, and Obstetrics, Vol. XVIII, April, 1914, No. 4, page 401), "Resection of the Rectum for Cancer with Preservation of the Sphincter."

Daniel Fiske Jones, M.D., Boston, Mass., (Boston Med. and Surg. Journal, Vol. CLXXI, July-Dec., 1914), "Cancer of the Rectum."

Joseph Weiner, M.D., New York City, N. Y., "A New Operation for Stricture of the Rectum or Sigmoid."

- P. Lockhart Mummery, F.R.C.S. Eng., London, Eng., (*The Lancet*, Vol. 1, 1914), "Pain After Operation for Internal Piles, and Its Prevention."
- P. Lockhart Mummery, F.R.C.S., Eng., and M. K. Joshi, M.R.C.S. Eng., L.R.C.P., London, (*The Lancet*, Feb., 13, 1915), "Death from Strangulated Hemorrhoids."
- E. Palier, M.D., New York City, N. Y., (New York Medical Journal, Jan. 23, 1915), "Hemorrhoids and Hyperchlorhydria."

Chas. Gordon Heyd, M.D., New York City, N. Y., (Surgery, Gynecology and Obstetrics, 1914), "A Procedure for the Repair of Accidental Injuries to the Rectum."

#### RECTAL PROLAPSE AND ITS MECHANICS.

By Wm. M. Beach, M.D., of Pittsburgh, Pa.

The terms prolapse and procidentia are interchangable as applied to a dislocated rectum downward on account of defective anchorage.

Dr. Beach feels assured that many of the victims of dyschezia could give a history of prolapsus in childhood.

He states that we are coming to think of prolapsus in terms of hernia, the verity of which must be determined from a consideration of the pelvic fascia and intra-abdominal pressure. He gives in detail the anatomical reasons for the causation of rectal prolapse.

Under the head of treatment he states that a number of surgical procedures have been devised and advocated for the restoration of the dislocated rectum; that they have seemed to succeed for a time, only to prove a failure later on. He mentions several of the procedures and gives his reasons for and against their employment. He gives also his operation of choice.

CAUSE OF DISSATISFACTION WITH HEMORRHOIDAL OPERATIONS.

By Rollin H. Barnes, M.D., of St. Louis, Mo.

The reason for dissatisfaction with the textbook methods in the operative treatment of hemorrhoids, is that they are based upon the fear of hemorrhage, and that pace has not been kept with modern surgical knowledge in regard to the control of this hemorrhage.

It is easier to take care of primary hemorrhage than of secondary bleeding such as may occur from a slough following the ligature or the clamp and cautery operation, because the surgeon is not always at hand when the latter occurs.

In the methods of Dr. J. Rawson Pennington, (A. P. A. Trans., 1914), and the author, (A. P. A. Trans., 1912), a clean excision of the hemorrhoid is done, so that it requires only controlling the primary hemorrhage, for there is no slough. The tissues are injured as little as possible so that they will retain the greatest amount of resistance against infection. There is less pain in these open methods for we do not have the "confined infection" which is especially caused by the use of sutures and by injuries to the deeper tissues.

For the control of hemorrhage the author advocates the use of pressure. Also care should be taken of the bleeding vessel itself rather than a ligature should be tied around a mass of bleeding tissues, or that they should be cauterized. He also advocates that advantage be taken of that muscular contraction which can be secured to the greatest extent by minimizing trauma. The rectal plug acts against this muscular contraction.

The author opposes the customary purgation in the preparation of the patient before operation. He prefers the cold enema as a means to clean out the lower bowel. He contends that the daily enema in the after-treatment does not result in constipating the patient but rather aids in securing regularity of bowel action.

REPORT OF CASE OF CARCINOMA OF THE SIGMOID: WITH STEREO-RADIOGRAMS.

By Walter I. LeFevre, M.D., of Cleveland, Ohio.

Patient, male, age 55 years. Suffered with abdominal pain in the left iliac fossa for one and a half years. Complained of constipation, becoming gradually worse until a natural passage was impossible. Use of enemas resorted to but difficult to retain.

Stereo-roentgenogram made by injecting Barium Sulphate emulsion (consisting of Barium Sulphate 6 oz., Pulv. Gum Tragacanth, 2 drams, Aqua, 40 oz.) This would start to be expelled when about 10 oz. was injected, but by repeated efforts 30 oz. was finally injected and retained long enough to get the pictures. Some of the emulsion passed to the upper end of the ascending colon; the transverse colon was filled; the descending partially filled; the sigmoid and rectum entirely filled. The pictures show the sigmoid loop bound down in the pelvis and almost occluded. Operation confirmed the findings. Condition hopeless. Patient died.

# EMETIN HYDROCHLORIDE IN THE TREATMENT OF AMEBIC DYSENTERY.

By Geo. B. Evans, M.D., of Dayton, Ohio.

Amebic dysentery is epidemic in tropical regions. It may become endemic by importation. Although various authors have contributed to a very comprehensive knowledge of the disease, there still exists considerable confusion in the interpretation of those symptoms and signs which make for accurate diagnosis and prognosis.

Dysentery may persist for months or years after the amebic ulcerations have been healed, without amebiasis being present. It may exist in a mild or severe form.

A positive diagnosis can only be made by the aid of the microscope. The smears should be taken preferably from the ulcerations on the free border of the rectal valves.

The author believes that treatment by irrigation is a thing of the past. It has been supplanted by emetine hydrochloride hypodermically.

Diet and rest are very important in treatment.

The conclusions are that what quinine is to malaria, and mercury to syphilis, emetine hydrochloride, hypodermically, is to amebiasis.

THE PRESENT STATUS OF LOCAL ANESTHESIA IN THE SURGERY OF THE LOWER BOWEL.

By Louis J. Hirschman, M.D., of Detroit, Mich.

Nowhere has the real value of local anesthesia been demonstrated more conclusively than in entero-proctologic surgery.

Dr. Hirschman employs local anesthesia in the surgical treatment of the majority of his cases of anal and rectal diseases, as well as in a small proportion of cases involving surgery of the colon. The results in both classes of surgical operations have been so satisfactory to both the patient and the surgeon that the author advocates with great earnest-

ness the further employment of local anesthesia not only in the field of intestinal surgery but also in every branch of surgical activity where absolute unconsciousness of the patient is not a strict necessity.

The technique which Dr. Hirschman uses in his ano-rectal operations and in his work on the colon is given in detail.

WHICH IS THE BEST ANESTHESIA TO BE USED IN ANAL AND RECTAL SURGERY.

By Wm. H. Kiger, M.D., of Los Angeles, Cal.

Dr. Kiger was prompted to write this paper on seeing a statement in a recently published book on "Diseases of the Rectum and Colon" which read, "Spinal anesthesia has a very limited field of usefullness. Indeed one is hardly ever justified in using it in rectal work."

After a personal experience in over five hundred rectal operations without a single unpleasant result, the writer of this paper is constrained to differ from the text-book author, and is forced to the opinion that the latter has not given spinal anesthesia a fair trial, or that he, mayhaps, did not use the proper agents.

Dr. Kiger calls attention to the ease of administration of spinal anesthesia; that it may be given without the assistance of an expert anesthetist; that it saves time by doing away with the delay incident to an operation under a general anesthetic; that by its use the dangers of chloroform and ether are eliminated, as are also their after effects; that when it is employed there is no need to dilate the sphincters as all the operator has to do is to ask the patient to strain and the gut will easily protrude through the relaxed sphincters; and finally that it avoids shock.

He uses novocain or tropococain and gives in detail his technique for spinal anesthesia.

FURTHER OBSERVATION ON THE TREATMENT OF PRURITUS ANI
BY AUTOGENOUS VACCINES.

By Dwight H. Murray, M.D., of Syracuse, N. Y.

In making the fifth report of his original research work on Pruritus Ani and Pruritus Vulvae, Dr. Murray gave the results of the examinations concerning the etiology of twenty-one additional cases together with their treatment, complications, and present condition. He also reported further on the cases previously examined, treated, and reported.

Dr. Murray hoped that no reader of his papers on this subject imagined for a moment that he claimed that all of these cases made prompt and complete recovery with no relapses.

He believes that he is still justified in emphasizing the claim that most cases of Pruritus Ani and Vulvae are due to a local infection which may be benefited by treatment with autogenous vaccines.

Where he was unable to find streptococcus infection at the first bacteriologic examinations, this year when the patient had a slight relapse streptococcus fecalis was found. This gives additional evidence that infection may be present and yet the bacteriologic report not show it.

Even when we have the knowledge that it is a skin infection; that the phagocytic power of the blood is below normal for the infecting bacteria; and that the vaccine injections give the best and most lasting relief; yet we are still unable to give patients a definite statement as to the number of treatments or length of time necessary before improvement will begin. Nor are we able to assure them that no relapse will occur.

Six cases confirm the claim made in the fifth conclusion of his third report, namely, "The presence of skin infection with a local lesion begets an unfavorable prognosis for the cure of pruritus ani by an operative procedure. Three cases confirm the claim made in the sixth conclusion of his paper in 1913, namely, "The absence of a demonstrable skin infection with pruritus ani together with the presence of a local lesion will justify a favorable prognosis for the cure of the pruritus ani by an operative procedure."

Acute cases do not seem to obtain the benefit from the vaccine treatment that chronic local infections receive.

Dr. Murray noticed that three of his very severe cases received little benefit during their course of treatment. He advised suspension of treatment and within a short time a marked improvement occurred in the severity of the pruritus and later the patients reported that the itching had practically ceased.

He states that he can account for this only upon the hypothesis that they were in a continuous negative phase while the vaccine was being administered, and that after discontinuing it they came into a positive phase. This might be taken as evidence that vaccine may be continued too long or the doses given too frequently.

The author says that in all the patients that he has examined and treated during the past year, it is remarkable that the cases of fistulae, hemorrhoids, ulcer, cancer, diseased crypts, hypertrophied papillae, constipation, and stricture gave no history whatever of having a pruritus ani. Yet authors still give these as causes. This confirms his statement in the second conclusion of the second report, namely, "Even when there is a discharge of pus or other moisture on the perianal skin it is not the actual cause of pruritus ani unless there is a streptococcic or other infection of the skin. They may exist together, but if so it is a coincidence."

This proof should satisfy the most skeptical and is an investigation that all can make without trouble.

The relapsed cases that returned for treatment have responded more readily to the vaccine treatment than when

they first came, and some who have not returned report that the itching is easily controlled.

Results of treatment by autogenous vaccine still continue to be the most satisfactory of any Dr. Murray has yet used. Patience and perseverance are necessary on the part of both the patient and the physician.

PERITONEAL ADHESIONS AND INTESTINAL STASIS.

By Jas. A. MacMillan, M.D., of Detroit, Mich.

The author of this paper states that the interest of the medical profession in this subject was awakened by the work of Mr. Arbuthnot Lane, of London, England; that there is a demand for operative interference in many cases of intestinal stasis, but for an operation less radical than that of extirpation of the colon; that although in the majority of instances they are not causative factors, peritoneal adhesions in some instances produce intestinal stasis.

He further states that there are two points in diagnosis which the paper is intended to emphasize: (1), The importance of pain and tenderness. (2), That the offending adhesion will be found to belong to a few definite types.

CONSTIPATION WITH SPECIAL REFERENCE TO ITS TREATMENT.

By Lewis H. Adler, Jr., M.D., of Philadelphia, Pa.

Dr. Adler called attention to the fact that the intestinal tract is the chief sewer way of the body, and as such, required as much attention as the plumbing in one's dwelling; that the term "Constipation" is a relative one and the line of demarcation between what is physiologic and that which is pathologic, in a given case, can only be drawn by a thorough study and knowledge of the individual; that the standard of health in one person, whose bowels move only on alternate days may be as perfect as in the individual who has two normal bowel actions per diem: that one of the chief

etiologic factors in producing, or inducing, this malady is the neglect, frequently repeated, to respond promptly to the calls of nature; and to the pernicious practice which Americans, at least, have fallen into, of resorting to the taking of purgative medication.

Attention was called to the contra-distinction between obstipation and constipation. In constipation we have to deal with functional diseases of some portion of the intestinal tract; while in obstipation there is normal functional activity, but there is some deformity, growth, constriction, flexion, or foreign body in the intestinal canal which offers a mechanical obstruction to the passage of the fecal current. He stated that these distinctions must be borne in mind, for while they may present similar symptoms, the treatment is entirely different.

The chief object of the paper was to lay stress upon the treatment of constipation by other than medicinal means.

The author advises that all conditions, general or local, which interfere with the health of the individual, should be removed; and that diet and hygiene should be given careful consideration. He also advises that where massage is given it should be carried out by the physician himself and not by a masseur.

THE ULTIMATE NERVOUS RESULTS OF ACUTE ANGULATION OF THE SIGMOID, AND THE CONSEQUENT FECAL STASIS.

By Wm. H. Axtell, M.D., of Bellingham, Wash.

Dr. Axtell divides the nervous end results into three general types:

- (a) Severe type: Including acute mania;
- (b) Moderately severe type: Including melancholia; chronic sciatica; chronic lumbago; trophic corneal ulcers;
- (c) Mild type: Including eczema; the apathetic; the neurasthenic.

He was not prepared to say whether or not the angulations found were the cause of the fecal stasis, or the stasis the cause of the acute angulation. These conditions, however, were found in all of those cases, and the nervous conditions which were produced disappeared upon correction of the angulation and stasis.

Dr. Axtell's conclusions are:-

- (1) Many cases treated as typhoid fever are simply cases of constitutional and systemic infection from putrefactive toxins of the alimentary canal.
- (2) If the true condition were recognized at the outset, and if the colon were thoroughly cleansed of the soil for the growth of typhoid bacteria, there would be fewer cases of typhoid fever.
- (3) Physicians do not as a whole examine the rectum and colon with the same degree of precision that they do other parts; they do not have a true appreciation of its importance; nor do they comprehend what persistence is required to empty the colon.
- (4) We are all too much inclined to cling to precedent, rather than to act according to the conditions found.

#### NOTES ON RECTAL FISTULA.

By J. Rawson Pennington, M.D., of Chicago, Ill.

The etiology, conformity and classification of fistula as presented in our textbooks is not satisfactory.

The rectum extends from the termination of the sigmoid, at a point opposite the middle of the third sacral vertebra to the pectinate line. The anal canal extends from this line to the anus. A fistula, then, with the external opening in the anal canal should be classified as an anal-fistula, or fistula-in-ano. A fistula with the internal opening in the pectinate line, or junction between the rectum and the anal canal, partakes of both of these structures, the rectum and

anal canal, and should be known as an ano-rectal fistula. While those cases with the internal opening in the rectum should be known as rectal fistula. Complex, compound, horse-shoe, and other so-called varieties of fistula are simply expressions of complexity, position, or shape, of one or the other of the foregoing divisions, or a combination of them.

Methods of Treatment.—Many methods have been proposed for the treatment of fistula. The author desires to submit herewith another which he believes to be far more important than any as yet presented—The Preventive Treatment. All methods may be classified under three general heads, viz.: the preventive, palliative, and curative. Under the former may be considered the prophylactic and the abortive treatment. Under the latter the injection and the operative treatment.

- (a) Prophylacic Treatment.—It is said that an ounce of prevention is worth a pound of cure. This injunction is as apropos in the treatment of fistula as in the treatment of any other malady. A complete history and careful examination usually elicit the fact that practically every individual who has fistula has or has had hemorrhoids, cryptitis, fissure, pruritus ani, proctitis, or some other form of curable rectal disease. These conditions favor the invasion of the peri-rectal tissues with pyogenic organisms, which is usually followed by an abscess and fistula. Hence, if people were educated to keep their rectums in a healthy state, and did so, fistula would become less frequent. Since the number of cases may be reduced by education, it becomes our duty as proctologists to launch a campaign for the prevention of this loathsome affliction—Fistula.
- (b) Abortive Treatment.—The time to abort fistula is during the infection or abscess stage. If the abscess is opened early and the pus allowed to escape, and the abscess wall is not interfered with in any way with instruments or drugs, but the cavity drained freely, and gently filled with

subnitrate of bismuth ointment, and this treatment repeated every two, three or four days, according to the indications, fistula will, as a rule, be aborted.

# FECAL ABSCESS IN POUCH OF DOUGLAS, FOLLOWING TYPHOID: REPORT OF CASE.

By Alfred J. Zobel, M.D., of San Francisco, Cal.

The author of this paper stated that for the past thirty years very few cases of fecal abscess have been reported in the literature. Only one of the more recently published text books of surgery gives even brief mention of the subject.

A fecal abscess is distinctly different from an abscess in which the pus has been so tainted by a growth of colon bacillus that from the odor it may be mistaken for fecal matter.

It may occur in connection with any portion of the intestine, and originate either externally or from within. When it originates without it may subsequently burst into the gut, empty its purulent content, and have it replaced wholly or in part with fecal matter.

A fecal abscess which originates from within the gut usually results from a slow, progressive ulceration of the mucosa, due either to general conditions, such as typhoid fever, dysentery, tuberculosis, or cancer, or to local causes, such as chronic intestinal catarrh, stricture, a hard accumulation, or a foreign body.

The writer of this paper reports a case of fecal abscess which not only filled the cul-de-sac of Douglas, but also had invaded the tissues between the rectum and the vagina. The patient, a woman of forty-two years had had a miscarrage eight years previously, and was told at that time that some kind of a swelling could be felt in her rectum. However this gave her no trouble then, nor subsequently, and it had been entirely forgotten. When her present

trouble began, two and a half months after an attack of typhoid fever, the history of this former condition complicated the diagnosis. On digital examination a large, smooth, immovable, brawny mass, beginning about 21/2 c.m. above the internal sphincter, and extending beyond reach of the finger, was felt bulging from the right-lateral and anterior sides of the rectum. The mucosa was freely movable over No sign of fluctuation could be elicited. No particular pain was caused by deep pressure. The temperature and pulse rate were normal. It had been aspirated through the rectum by her physician, and a slightly turbid fluid had been withdrawn. This mass began to swell into the vagina, and in two days so occluded the passage that it almost prevented the entrance of the examining finger beyond the portal. Slight fluctuation was then felt. There was severe rectal pain. The temperature was still normal; the pulse 90. An exact diagnosis was not made before the operation. An incision was made through the postero-lateral vaginal wall. Upon blunt dissection a tense sac presented. When this was punctured the contents gushed out in a thick sluggish stream which kept flowing for some little time. From its strong fecal odor and brownish-yellow, lumpy appearance it apparently consisted wholly of semi-liquid, mushy feces, similar to what is found in the lower end of the ileum Nearly two pints of this foul material was and cecum. Fecal drainage ceased entirely eight hours after the abscess was opened. The turbid discharge which remained rapidly decreased in quantity and in less than four weeks after the fecal abscess was evacuated, the wound was completely healed.

Dr. Zobel said that although a fecal abscess is met with so rarely the possibility of it being present should be taken into consideration in the differential diagnosis of obscure intra-abdominal tumors. He concluded by quoting from Fenwick: "Where there is a localized abdominal swelling, immovable by the respiration or by a moderate amount of pressure of the fingers; whose size and shape alters when diarrhoea occurs; in which light percussion gives a tympanitic, and a more forcible stroke a dull sound; or in which an emphysemateous sensation is communicated to the fingers, or a gurgling sound produced by percussion; it will be probably of fecal origin; and this more probably when there is a history of anything apt to produce ulceration.

ISCHIORECTAL ABSCESS IN NINE-DAY-OLD INFANT: REPORT OF CASE.

By Alfred J. Zobel, M.D., of San Francisco, Cal.

The abscess was first noticed on the ninth day after the birth of the child. No cause could be discovered for its formation. It was incised on the twelfth day without any anesthesia. It was curious how the abscess cavity, which was quite large, filled up so rapidly; complete healing taking place at the end of a week.

Officers elected for the ensuing year: President, T. Chittenden Hill, M.D., Boston, Mass.; Vice-President, Frank C. Yeomans, M.D., New York City, N. Y.; Secretary-Treasurer, Alfred J. Zobel, M.D., San Francisco, Cal.

Executive Council: T. Chittenden Hill, M.D., Boston, Mass.; Louis J. Krouse, M.D., Cincinnati, Ohio; Geo. B. Evans, M.D., Dayton, Ohio; Alfred J. Zobel, M.D., San Francisco, Cal.

The place of meeting for 1916 will be Detroit, Mich. Exact date and headquarters will be announced later.

The following were elected Associate Fellows of the Society: P. Milton Linthicum, M.D., 817 Park Ave., Baltimore, Md.; Wm. H. Stauffer, M.D., Humboldt Bldg., St. Louis, Mo.; Wells Teachnor, M.D., 187 E. State St., Columbus, Ohio.

### Reviews and Book Notices

A TEXT BOOK OF SURGERY FOR STUDENTS AND PRACTITIONERS. By George Emerson Brewer, A.M., M.D., Professor of Surgery, College of Physicians and Surgeons, New York; Surgical Director, Presbyterian Hospital; Consulting Surgeon, Roosevelt Hospital, assisted by Adrian V. S. Lambert, M.D., Associate Professor of Surgery, Columbia University; Attending Surgeon, Presbyterian Hospital; and by members of the surgical teaching staff of Columbia University. Third edition, thoroughly revised and rewritten. Octavo, 1027 pages, with 500 engravings and 23 plates in colors and monochrome. Cloth, net, \$5.50. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

This is a complete reference work or student's text in one volume, covering the whole subject of surgery, by a master of clinical surgery and clinical teaching. In the new third edition the same broad survey of modern surgery, manifest authority, clear statement, and careful selection of the tried and proven procedures for presentation, are again evident. Its scope, however, is broadened and its size increased to provide for the adequate treatment of the numerous recent advances in surgery. The revision has been so careful that it stands as a final and authoritative presentation of advanced thought and approved practice. The sections dealing with pathology, infections of the hand, joint diseases and cellulitis, evidence, to a notable degree, the author's advanced viewpoint and his attention to technique and detail.

The recent advances in surgery have been so great that it has been necessary to largely rewrite this work. The author has secured from members of the teaching staff at Columbia University, who have been in intimate touch with progress in these fields, chapters dealing with some of the most notable recent advances. This results in adequate and appreciative treatment, and at the same time increases the authority of the work and its didactic quality.

The chapters dealing with Hernia, Infections of the Hand, Cellulitis, Spinal Cord, Nerves, Head, Bone Infection and Shock, in particular, give evidence of the careful revision and the thoroughly modern viewpoint adopted. The size of the volume has been substantially increased. The illustrations, many of which are from photographs in the surgical laboratory of the Presbyterian Hospital and from Lumiere photographs of clinical conditions, are so selected as to assist greatly in the mastery of the text.

THE PRINCIPLES OF BACTERIOLOGY. A Practical Manual for Students and Physicians. By A. C. Abbott, M.D., Professor of Hygiene and Bacteriology and Director of the Laboratory of Hygiene, University of Pennsylvania. 12 mo, 650 pages, with 113 illustrations. 28 in colors. Cloth, \$2.75, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The recent remarkable developments of bacteriological science have necessitated so many changes in the text that the author has embraced the opportunity to review the whole subject from the most modern viewpoint, to include all recent advances of proven value, eliminate all obsolete and unessential material, and to greatly elaborate his work; this ninth edition being essentially and practically new.

Concise statement, clear expression and the elimination of theoretical considerations in favor of essentials constitute this a working manual whose usefulness will impress itself more and more on the practitioner or student as he avails himself of its guidance. Every step in every process is made clear. The details of laboratory equipment and the use and value of apparatus receive careful attention. The minutiae of laboratory technic are presented in complete but not burdensome detail.

Historical notes, which are not too profuse, stimulate interest in the study, and aid in the comprehension of the subject by showing the steps in the development of modern Bacteriology. The author's emphasis on the applications of

Bacteriology in Etiology and Preventive Medicine is a point of peculiar value. The sections dealing with the physiological functions of bacteria are most enlightening, and the latest knowledge of complement fixation, hemolysis and the reactions of immunity is adequately presented. The diagrammatic illustrations accompanying this section are a substantial aid to its understanding.

This is a simply expressed but thoroughly scientific presentation of the proven and useful in a field where the seeker after information is often confronted by a baffling mass of abtruse and often theoretical details.

PRACTICAL MATERIA MEDICA AND PRESCRIRPTION WRITING, (illustrated), 8 vo. cloth, pp. 549. Price, \$4.00, net, by Oscar M. Bethea, M.D., Ph.G., F.C.S., Assistant Professor of Materia Medica and Instructor in Prescription Writing, Tulane University of Louisiana; formerly Professor of Chemistry and Pharmacology, Mississippi Medical College, etc., etc. F. A. Davis Co., Publishers, Philadelphia, Pa., 1915.

In this excellent work by a Southern author are included all officinal drugs, together with a few others that are occasionally used by practitioners of Medicine; full and complete information is given how to employ them to meet the conditions in which they are commonly used. Drugs that are seldom prescribed are not considered in detail.

Ordinarily the student is taught how to diagnose certain pathological conditions, the changes to be effected and the drug or combination to secure desired results. It is only too often neglected to sufficiently impress on him just what preparations will best meet the demands of particular conditions, the precautions to be observed in their use, how to correctly prescribe them, alone or in combination, and, if in combination, with what forms or preparations of other agents; how to order for the safest, most convenient and agreeable administration; how to use their correct names, estimate the proper quantities, the best time for adminis-

tration, and many other matters an ignorance of which will render the physician unable properly to practically use his knowledge of the other departments of medical science. Such instruction is effectively and attractively brought out in this volume; and the subject-matter has been handled in such a practical and efficient way as to render the work a dependable one for every-day use.

The eighth decennial revision of the U. S. Pharmacopeia and other standard authorities have been thoroughly consulted. A very full Clinical as well as General Index complete the volume.

CANCER: ITS STUDY AND PREVENTION. By Howard Canning Taylor, M.D., Gynecologist to the Roosevelt Hospital, New York; Professor of Clinical Gynecology, Columbia University; Member American Society for the Control of Cancer, etc. 12 mo, 330 pages. Cloth, \$2.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

Dr. Taylor's work is a clear, condensed and complete presentation of our present knowledge in regard to cancer. He views the subject in its broader aspects, and offers much information which is not only of immediate value to the physician, but available for dissemination by him among the laity in the hope of reducing the cancer death rate by creating a more intelligent understanding of the causes of cancer; the means by which the individual may lessen his liability to attack, and the possibility of complete cure as the result of early operative treatment.

Every item of available information which sheds light on the causes of cancer or indicates measures for its prevention is presented logically and in complete detail. Emphasis is laid on diagnosis and on the importance of the early recognition of the disease. To further this the earlier symptoms are enumerated at length in the consideration of each type of sarcoma and carcinoma. Pathology and Etiology are given extensive consideration as is the treatment of inoperable cases. The full statistical information is so arranged by the author as to afford the largest measure of assistance to the practitioner, who will find this volume a concise and at the same time complete guide in his handling of these cases.

THE PRINCIPLES OF HUMAN PHYSIOLOGY. New (2nd) edition. By Ernest H. Starling, M.D., F.R.C.P., F.R.S., Jodrell Professor of Physiology in University College, London. Octavo, 1271 pages with 566 illustrations, including 10 in colors. Cloth, \$5.00, net. Lea & Febiger, Publishers, New York and Philadelphia. 1915.

The author, who is one of the world's leading physiologists, has, in preparing for the publication of a new edition, taken advantage of the opportunity to subject a work already characterized by its completeness of detail and its high authority to a microscopic scrutiny. His subject is presented in strict conformity with the most advanced viewpoint, and his vehicle is a literary style, which is a material aid in sustaining the reader's interest and in making clear the involved aspects of the subject.

While making full use of the material recently made available by the work of the most successful investigators in this field, the author has impressed his personality on every line of this book, and has drawn most heavily in its preparation on his own observation and study. The work of the student has been made easier and the material presented rendered more accessible by slight condensations and by rearrangements. Throughout the work modifications have been made to conform to the newest conceptions. The sections dealing with the voluntary muscles and with the circulation have been entirely re-written to incorporate the very important additions to our knowledge of these subjects which the investigations of the past two years have contributed. New chapters have been added dealing with the nutrition of the brain and with the innervation of the bronchi.

### Editorial.

#### PREVENTION OF BLINDNESS.

The National Committee for the Prevention of Blindness has recently issued a circular, which we take pleasure in reproducing in full, describing what woman's clubs and nursing organizations can do to prevent blindness. It was written in response to frequent request from nurses and club women for guidance in initiating or continuing prevention of blindness work. It is a program which might be suggestive to practically any organization, either lay or medical, which could or would include prevention of blindness among its activities.

It is estimated that fifty per cent of all blindness is preventable: This statement will be surprising to many—that one-half of the sightless people in this country need not have been blind had proper care been given to their eyes. But it has long been known by those endeavoring to prevent unnecessary blindness that more than a quarter of the pupils in the schools for the blind are sightless because their eyes were not properly treated during the first few days of life; that poor midwives are in part responsible for this tragedy; that children become totally or partially blind from neglected "sore" and "weak" eyes, and from neglect after attacks of such infectious disease as measles, scarlet fever, etc.; that progressive nearsightedness among children may cause total or partial blindness if neglected; that household and industrial accidents cause the loss of many eyes; that drinking wood alcohol or inhaling its fumes in close places causes both blindness and death; that inadequate lighting and glaring surfaces are responsible for much visual disturbance, including eyestrain; and that eye-strain is a frequent cause of both mental and physical inefficiency.

Visiting nurse organizations and women's clubs, working independently or, better still, together, can perform valuable service in the elimination of these causes, thereby saving babies, children and adults from lifelong blindness.

"Babies' Sore Eyes" (Ophthalmia Neonatorum):—This disease, which causes so much bblindness, is preventable and, if taken in time, is curable.

The prevention of blindness from babies' sore eyes is accomplished through the routine use of one per cent. solution of silver nitrate, or some such prophylactic, in all infants' eyes immediately after birth, and by prompt and skilful treatment of babies' eyes when they become red, swollen and discharging, whether or not a prophylactic has been use.

- 1. Does the birth certificate used in your locality include the question, "What prevention did you use for ophthalmia neonatorum? If none, state the reason therefor?"
- 2. Are prophylactic outfits distributed gratuitously by your Health Officer to doctors and midwives?
- 3. Are doctors, midwives and parents required to report to the Health Officer, within six hours, redness, swelling or discharge from the eyes of infants in their care who are under three weeks of age?
- 4. Is this reporting law printed on the birth certificate—thus acting as a constant reminder?
- 5. Has the Department of Health a nurse in its employ, or does it so co-operate with a nursing organization that it may send a nurse at once to visit each reported case and secure adequate medical or hospital treatment for uncared-for cases?
- 6. Are there such hospital facilities for the care of babies' sore eyes that the Health Officer may send an infant to a hospital without delay if the eyes are in a serious condition?

Take these points up with your Health Officer, interested oculists and obstetricians, and don't rest until they are all attended to. Make it your business to see that any baby suffering from sore eyes, of which you have knowledge, is given prompt and adequate medical attention.

Try to have at least one nurse in the community for eye work exclusively, and see that there are hospital facilities for treatment of severe cases of babies' sore eyes.

Midwives:—These women attend about half the births occurring in this country, and the majority of them are dirty, ignorant and generally unfit to assume the care of mothers and babies. Although the carelessness of many physicians is equally reprehensible, it is due in great measure to the ignorance and neglect on the part of midwives that many babies become blind from babies' sore eyes,

- 1. Are there midwives practicing in your community?
- 2. Are they registered by an official body?
- 3. Is it required that they be adequately trained; pass an examination; obtain a license; and register before beginning to practice?
- 4. Has your community a midwife training school connected with a good hospital?
- 5. Do the practising midwives give clean, careful nursing care to mother and child, and instruction to the mother concerning hygiene of pregnancy and care of her child??

- 6. Has the State or City Health Department adopted rules regulating midwives' practice in detail and requiring them to summon a physician in all but normal cases?
- 7. Are there inspectors to enforce the rules and give helpful advice to the midwives?

Make it your business to find out about this, for the sake of the mothers and babies. Your Board of Health is the proper body to have control of midwives. The Board of Education should regulate their training and licensure.

Eyesight of School-Children:—Many normal children seem backward because they have sore eyes or defective vision. Failure to correct these defects will probably mean continued retardation for many of the children, and inability to reach their highest possible mental and physical development and economic efficiency. Continued neglect may result in partial or total blindness.

- 1. Are all class-rooms in your schools adequately lighted?
- 2. Are the blackboards and tops of the desks lusterless?
- 3. Are all of the desks adjustable?
- 4. Are the children's eyes carefully and regularly examined for nearsightedness and other visual defects, and for various kinds of "sore" eyes?
  - 5. Is this done by an oculist?
- 6. Are there clinics where school-children with "sore" or "weak" eyes may be treated?
- 7. Is there provision for furnishing eye-glasses to indigent children who need them?
- 8. Are common towels allowed in your schools? (They spread eye diseases.)
  - 9. Are the children taught how to take care of their eyes?

Improving the eyesight and general surroundings of school-children will be of immediate benefit to them, and will increase their chances for enjoying health and prosperity later in life.

Talk to your Board of Education about this—it is important. The children can't do it themselves.

Industrial Accidents:—Many good workmen are seriously handicapped and even become public charges as a result of losing one or both eyes in an accident that might have been prevented. Men, women and children often suffer from severe eye-strain because they are not provided with adequate light while at work.

1. Are workmen in the factories and shops in your locality protected from eye accidents by goggles; guards on emory wheels; screens to catch flying chips; guards on water gauges; etc.?

- 2. Are the factories, workshops and workrooms adequately lighted?
- 3. Are workmen examined to see that they are not especially liable to accidents because of defective vision?

Take these points up with your Department of Labor, Industrial Safety Commission, or some similar body. The eyes are bread-winners and must be carefully guarded.

Wood alcohol is a poison which may cause blindness or death if swallowed, or if its fumes are inhaled in an inadequately ventilated place.

- 1. Have you a law forbidding wood alcohol to be sold in any form without a poison label and warning?
- 2. Is the use of wood alcohol absolutely forbidden in beverages, medicines and toilet preparations?
- 33. Are your druggists, paint and varnish dealers, liquor dealers, grocers and barbers prosecuted for failure to comply with the above restrictions?
- 4. Is wood alcohol used in any of your local industries? If so, are employers required to protect their workmen from poisoning by providing adequate ventilation.

Your Board of Pharmacy, Department of Labor, Health Department and Commissioner of Excise have jurisdiction in this matter. Find out what they are doing about it. In the meantime, urge your druggist to give up the sale of wood alcohol, and urge your friends to use denatured alcohol instead. It is safer and cheaper than wood alcohol.

The National Committee for the Prevention of Blindness wants your help and co-operation in spreading the knowledge that much blindness is needless. It has data and information, lantern slides, exhibits and pamphlets on the various causes of unnecessary blindness and methods of prevention, and it is glad to share these with workers in all parts of the country.

In order to accomplish the ends suggested in the foregoing program, it is necessary to have official action, supported by public opinion. Try to have at least one big popular meeting annually under the joint auspices of the local Medical Society, the Health Officer, Superintendent of Schools, Y. M. C. A., women's clubs, nursing organizations and relief agencies. Arrange for talks before school children, mothers' clubs, etc., and secure as much newspaper publicity as possible. Write to the National Committee for suggestions and assistance. The educational work must be sustained—the effort unremitting.

Ella L. Blair, Chairman, Public Health Department, General Federation of Women's Clubs.

Carolyn C. Van Blarcom, Secretary, National Committee for the Prevention of Blindness, 130 East 22nd Street, New York City.

#### CANNING COMPOUNDS DANGEROUS TO HEALTH.

Information has come to the National Department of Agriculture that the canning season has brought the usual demand on the part of housewives for salicylic acid and boric acid. These preparations are sometimes sold in the form of powder under various trade names and are recommended by the promoters for use in preserving canned goods in home canning. In the directions for use the housewife is told to fill the jar with the fruit or vegetables, cover with water, and add a teaspoonful of the preserving powder. While it is true that these compounds may retard the decay of the fruit or vegetable, it is pointed out by the experts of the Department that their use may be attended by serious disturbances of health. Salicylic acid is well known as a poisonous substance, and one of the evils which may accompany its use is derangement of the digestion. It is therefore plain that its extensive use in food may lead to disturbance of digestion and health.

The Federal Food and Drugs Act prohibits the use of harmful preservatives in foods that enter interstate commerce. The food law of nearly every state in the union forbids the sale within the state of foods that have been preserved with harmful substances. Neither the Federal or State food laws apply to foods that are canned in the home and consumed there. It would seem, however, that the housewife would not knowingly use, in the foods she provides for her family, substances that she could not use in foods for sale without violating the law, because these substances are injurious to health.

Artificial preservatives not necessary, fruits and vegetables can be kept indefinitely if they are sterilized by heat and properly sealed, and there is no excuse, in the opinion of the experts of the Department, for running any risk by using preserving powders, which may be injurious to health. The use of such powders in addition to the possible injury to health encourages uncleanly or careless work in canning. Reliance is placed in the efficacy of the preserving compound instead of upon cleanliness and heat.

The Department has issued bulletins that give specific directions for the preserving and canning of fruits and vegetables without the use of preserving powders or canning compounds. These bulletins may be obtained without cost from the Department of Agriculture. Application should be made for Farmers' Bulletin, No. 203 on Canned Fruits, Preserves and Jellies, and No. 521 on Canning Tomatoes at Home and in Club Work. Also Forms N. R. 22, N. R. 34 and N. R. 37 of the Office of Extension Work, North and West, States Relations Service.

CORPORA LUTEA:—That Corpora Lutea is a therapeutic agent of great value in the treatment of certain diseases and conditions peculiar to women is now an established fact. It is known that functionally the corpus luteum sustains a more or less important relation to ovulation, menstruation, nutrition of the genitalia, lactation, etc. Perversions of these functions, as seen clinically, are often susceptible of correction by the administration of corpora lutea from animals in properly prepared form. For this vicarious therapy the ovaries from cattle and swine are procured and the corpora lutea removed, dried and powdered. This material is supplied by Parke, Davis & Co. in capsules of five grains each, equivalent to about thirty grains of fresh corpus luteum. The usual dose is one capsule three times daily, taken at least an hour before meals.

Corpora Lutea, P. D. & Co., has proved advantageous in the treatment of functional amenorrhea, dysmenorrhea of ovarian origin, manifestations of physiologic or artificial menopause, neurasthenic symptoms during menstrual life, sterility not due to infection or mechanical obstruction, loss of one ovary and inadequate functioning of the other, repeated abortions not due to disease or mechanical factors, hyperemesis in the early months of pregnancy, and migraine occurring during the menstrual period.

As one writer has well said, it seems highly probable that "in corpora lutea we have an agent that will prove a blessing to womankind."

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

THE BALANCE OF HEALTH is due to all metabolism. In fevers, infectious diseases, even in cancer, the balance may be obtained by using the cell product—Protonuclein. It has proven remarkably satisfactory in our hands in some very severe infections.



AN EXCELLENT LAXATIVE AND PURGATIVE:—Pil. Cascara Comp.—Robins, is prepared in 1 gr. (mild-laxative), and 4 grs. (strong-purgative), gelatine coated tablets.

It is the failure of the secretory functions of the bowel, together with a poor bile secretion, which, in nine cases out of ten, is responsible for constipation.

Most cathartics altogether overlook this factor and address themselves solely to a stimulation of the musculature. Some even inhibit intestinal secretion. The result is a rapid, unsatisfactory bowel movement followed by paralytic reaction.

Pil. Cascara Comp., Robins, is a rational therapeutic formula, which promotes a natural flow of secretions, which is, in turn, the physiologic stimulant of peristalsis. Thus a normal evacuation is produced, without subsbequent inhibition.

Samples and literature will be sent to physicians on request by A. H. Robins Co., Richmond, Va.

THE MOST NOTEWORTHY FEATURE about the action of Neurilla is its selective action on the irritable nervous system. The numerous physicians who have reported on the results which it has yielded in their hands are practically unanimous in remarking that it is "a valuable and safe nerve calmative" in functional disorders of the nervous system, and that it is in no sense a depressant and that its continued use entails no undesirable effects. This is important because of the ability to employ its calmative influence in states of nervous irritability in the young as well as the old.

SANDER & SONS' EUCALYPTOL has stood the test of Government investigation.

It was proved at the Supreme Court of Victoria by experts to be an absolutely pure and scientifically standarized preparation.

It is honored by royal patronage.

It always produces definite therapeutic results.

Therefore, to safeguard the physicians' interest and to protect their patients, we earnestly request you to specify "Sander's Eucalyptol" when prescribing eucalyptus.

TONGALINE & LITHIA TABLETS give such immediate beneficial effects for a condition due to faulty or defective elimination, manifested generally by headache, lassitude, insomnia, etc., and sometimes caused by over-exertion and lack of rest, that we earnestly desire every physician would test them personally. Mellier Drug Co., 2112 Locust St., St. Louis.

COD LIVER OIL IN HOT WEATHER:—So many otherwise excellent preparations of cod liver oil become intolerable in hot weather and must be suspended. This objection does not attach to Cord. Ext. Ol. Morrhuae Comp. (Hagee), for in its preparation the properties of cod liver oil that make it obnoxious in the summer have been eliminated, although, at the same time, the essential tissue-making elements have been carefully preserved and incorporated in a palatable vehicle. Cord. Ext. Morrhuae Comp. (Hagee) represents the highest degree of excellence in cod liver oil preparations, but may be used with profit to the patient in summer as well as other seasons.

LISTERINE is a saturated solution of boric acid, reinforced by the antiseptic properties of ozoniferous oils. It causes no irritation, even when applied to the most delicate tissues, nor does it coagulate serous albumen.

It is generally accepted as the standard antiseptic for use where a poisonous or corrosive solution cannot be safely applied. Listerine may be freely and continuously used without prejudicial effect either by injection or spray, in all the natural cavities of the body.

TYPHOID FEVER PROPHYLAXIS:—A statement was recently made in the House of Commons by the British Under-Secretary of State for War that only 421 cases of typhoid fever had developed in the British forces during the present war and that of these, 305 had not been inoculated within two years. Among those who had been inoculated within two years, there was only one death and this individual had received only one inoculation instead of the two provided for by the regulations.

THE THERAPEUTICS OF EPILEPSY:—A considerable number of practitioners have been gratified with the results secured in epilepsy through the continued administration of Pasadyne (Daniel). As is well known, Pasadyne (Daniel) is a special preparation of the concentrated tincture of passiflora incarnata. Aside from its therapeutic advantages, Pasadyne (Daniel) deserves recognition in epilepsy on account of its freedom from depressing influences and the production of eruptions and gastric distress.

DR. PAUL EHRLICH, the noted German scientist, died suddenly from heart disease August 21st, ult. He attained world-wide renown by the discovery and development of Salvarsan, in addition to his studies of Diphtheria Antitoxin, and other recent progressive therapeutic measures, one-half of the Nobel prize for medicine was awarded him in 1903.



CITY VIEW SANITARIUM is a thoroughly equipped and ethically conducted private hospital for the treatment of Mental and Nervous Diseases, Alcoholic and Drug Addictions. Two new buildings, one for each sex. Dr. John W. Stevens, Physician in Charge, Nashville, Tennessee, R. F. D. No. 1.

### Selections

THE TREATMENT OF DIARRHEA IN INFANTS:—It is a notable fact that the majority of diarrheal diseases in infants during the hot summer months are in bottle fed babies. This, of course, suggests that the trouble is in the food and not in the baby. If every physician would carry the gospel of maternal nursing to every mother, diarrheal diseases in infants would not take such an important place in pediatrics.

Diarrhea in infants may be due to:

- (1) General or local diseases not connected with the gastro-intestinal tract.
- (2) Gastro-intestinal indigestion, as a result of too much food, too frequent feeding, too high fat or sugar or a low-ered tolerance for fat or sugar, or both.
- (3) Intestinal infection with various pathogenic organisms or animal parasites.
- (4) Intestinal intoxication, caused by fermentation or putrefaction as a result of impure food or food not kept at the proper temperature.

The first essetial in the successful treatment of diarrheal diseases in infants is a correct diagnosis. When the diarrhea is simply a symptom of a general infection and not of gastro-intestinal origin, the treatment is that of the primary infection. If the trouble lies in the gastro-intestinal tract, the cause of the diarrhea and the condition of the little patient will largely determine the course of treatment.

The following general therapeutic principles apply to all cases of diarrhea of gastro-intestinal origin:

- (1) Elimination.
- (2) Partial starvation.
- (3) Control of peristalsis.
- (4) Proper medication.
- (5) Careful feeding.

One good dose of castor oil or calomel in divided doses should be given. At the same time the lower bowel should be irrigated with warm normal saline. The laxative drug should not be again administered, as repeated doses cause irritation and catarrhal inflammation of the intestines. Plain water, warm or cool, should be the only diet for twelve, or, if necessary, twenty-four hours. This starvation diet should not be repeated. The mistake is frequently made of too prolonged starvation. This only lowers the vitality of the already weak patient and decreases the chances of recovery. To control the painful peristalsis, hot moist applications to the abdomen are very grateful to the patient. If necessary, a few small doses of codein or deodorized tincture of opium may be given.

Many infants will get well without any medicine if the gastro-intestinal tract has been cleaned and proper attention has been given to feeding and general hygiene. When medicine is indicated it is only to soothe the inflamed gastro-intestinal tract and to counteract acidity. Bismuth subcarbonate with sodium bicarbonate is all that may be necessary. There is no room in the child's little stomach for heterogenous nasty, sticky chalk mixtures, with which are usually combined half a dozen other drugs, many of which are irrational or incompatible, as I have shown in an article on "Overmedication" in *Pediatrics*, June, 1914. It is very poor therapeutics to treat diarrhea with a diarrhea mixture; cough, with a cough mixture; sore throat, with a sore throat mixture; fever, with a fever mixture, and other aches and pains with an ache and pain mixture.

The feeding of the infant after the acute condition is over is of great importance, but there is no general rule to follow. Fitting the food to the baby should be the aim of the pediatrist. The infant's tolerance for milk or for the different elements in the milk should be carefully studied.

What not to do in the treatment of diarrheal diseases in infants is of more importance than what to do. Do not advocate artificial feeding if there is a mother to nurse the infant. When the supply of mother's milk is insufficient, complimentary feeding with modified cow's milk should be ordered. Do not give too many laxatives, never starve the baby too long and above all do not overmedicate the little patient.—J. Epstein, M.D., of New York, in N. Y. Medical Times.

EMETINE IN PNEUMONIA AND BRONCHOPNEUMONIA:—We find in *The New York Medical Journal*, April 24, 1915 (p. 848), an excellent abstract of a paper by Louis Renon, originally published in *Bulletins et memoires de la societe medicale des hopitaux de Paris*, March 6, 1914.

Renon reports his experience with emetine in the treatment of seven cases of croupous pneumonia and eight cases of bronchopneumonia. Of the former, in which the emetine was given in 1-3-grain (0.02 gram) doses twice daily, six ended in recovery. Althought no effect of the drug in shortening the course of the disease was noted, defervescence took place by lysis instead of crisis in four instances, the temperature beginning to recede as soon as the emetine injections were started. In four cases bronchial breathing was observed rapidly to give way to rather coarse subcrepitant rales, which persisted until the temperature had receded to normal, and even somewhat longer.

In the eight cases of bronchopneumonia, all severe and occurring in patients ranging in age from sixty to seventy years, more distinct therapeutic effects were noted. In some cases three 1-3-grain (0.02 gram) injections were given

daily. Dyspnea was mainfestly relieved, the bronchial breathing diminished and later ceased, the rales were rendered coarser, and expectoration rapidly increased in amount. The temperature, where high, showed a tendency to fall. Recovery took place in seven instances. The emetine failed to bring on nausea and vomiting or to interfere with the renal function.

Though the number of cases treated was small, Renon is disposed to consider emetine of value in all instances of serious lung inflammation, and especially recommends it in conjunction with camphorated-oil injections, digitalis, and ammonium acetate in grave cases of bronchopnuemonia.—

Am. Jour. of Clinical Medicine.

A DIPHTHERIA CARRIER:—During the latter part of November, 1914, a small epidemic of diphtheria broke out in Gouverneur. The health officer, Dr. Sayer, deemed it wise to take cultures from the throats of school children of the grade exposed. The culture from one boy, aged fourteen, was positive, although he showed no symptoms of diphtheria. This boy was isolated for four weeks and was then allowed to associate with other children in his family, none of whom at any time showed any symptoms of the disease. Repeated cultures taken and examined at the State Laboratory showed that a virulent strain of the diphtheria bacillus was present. Guinea pigs were inoculated with these cultures and promptly died with characteristic symptoms. Examination of this boy's throat showed that the left tonsil was slightly enlarged, the right apparently normal. throat specialist was consulted as to the advisability of removal of the tonsils. He advised against the operation as he feared it would not be safe in the presence of diphtheria germs.

The boy was seen by the Sanitary Supervisor February 22, 1915. At that time his throat was slightly irritated from the constant use of alkaline sprays and gargles. The

State Department of Health recommended the removal of the tonsils, which was done. The boy made an uneventful recovery from the operation and cultures taken a few days later were negative.

There are two lessons to be learned from this case:

- 1. The apparent immunity which the boy had against diphtheria and the safety of tonsillectomy in a diphtheria immune.
- 2. Prompt disappearance of diphtheria carrier after tonsillectomy.—B. R. Wakeman, M. D., in N. Y. Health News.

PLACENTA PREVIA:—Dr. John F. Winn, Richmond, Va., in *The Virginia Medical Semi-Monthly*, February 12, 1915, lays emphasis upon the point that Braxton Hick's version is demanded both before viability and after it when, in the latter case, the use of the elastic rubber bag followed by podalic version is not available.

During labor, when there is great loss of blood, Braxton Hicks' version offers the best results for the mother; but it should always be followed by slow extraction.

Milder varieties of placenta previa should not be overtreated; merely puncturing the membranes may control the hemorrhage. Cervical and vaginal tampons, if used at all, should be employed under rigid asepsis. They are rarely needed.

Cæsarean section has a very restricted place. It should be chosen under the following conditions: with the approach of full term; with the placenta covering a great part or the whole of the os; when hemorrhage is profuse, but not enough to make the mother a bad surgical risk; with the child probably weakened, yet offering reasonable prospects of being saved; when the cervix is in a condition suggestive of prolonged and difficult dilatation; where there is a negative history of vaginal contamination; and, the assurance of hospital technic.

REMEDY FOR SCIATICA:—I have read with interest and pleasure the reports of various methods of treating sciatica, as advocated by readers of Clinical Medicine. I want to suggest a method of treatment given me by my father, who graduated from the University of Michigan in 1854. He used this remedy for years, and with invariable success. Following his advice, I have used it myself ever since I began practice, and have found it effective, not only in sciatica, but also in other forms of neuritis. So far as I can remember, this remedy has not failed me once in twenty-five years; also, it acts just as nicely in the chronic type of sciatica as it does in the acute form, although a little more persistence is required when the case is chronic. How it cures, and why it cures, I cannot explain.

This remedy is ammonium chloride. I give it in 10- to 20-grain doses, three or four times a day, following it in every instance with at least half a glass of water.—O. F. Burroughs, of Plainwell, Mich., in Am. Jour. of Clinical Medcine.

EINHORN'S OPERATION FOR RECTAL PROLAPSE:—R. Tolken in Deutsche Med. Wochenschrift, March 15, 1915, describes the simple technique of the operation. During anesthesia the prolapse is reduced and the gut pushed up. While the left index finger is inserted in the rectum a needle is pushed through the skin on one side of the sacrum into the lumen of the rectum and brought out at anus. The large needle in a handle is then pushed through the skin on the opposite side, and after being brought out at the anus is threaded with the protruding suture and withdrawn. The rectum is now held up by a suture which is tied on the skin over the sacrum.

A bandage is scarcely necessary. The bowels are kept confined after this operation, and food is also withheld. The operation is applicable to children on whom good results are obtained.—Cin. Lancet-Clinic.

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## Priginal Communications.

THE SURGICAL TREATMENT OF VICEROPTOSIS.\*
BY W. A. BRYAN, M.D., F.A.C.S., NASHVILLE, TENN.

The neurasthenic has come justly or unjustly, to be the surgeon's bugaboo, even when presenting with a definitely recognized surgical lesion and gives the surgeon a case of buck-ague when seeking surgical relief from neurasthenic symptoms per se. The reason for this is manifest to every experienced surgeon, for assuredly that same patient will turn up again shortly with another appeal for surgical relief, and again and again ad infinitum, ad nauseam. the medical profession has concluded that neurasthenia. that neurasthenics, cannot be relieved by surgery; that these cases should not be subjected to surgery except in the direst extremity, and that when a surgeon accidently relieves a neurasthenic it is due to the fact that either it is not neurasthenia at all, or, if so, that the relief is due to some hypnotic power the surgeon practices and not to the exercise of his art upon the lesion present.

<sup>\*</sup>Read at regular meeting of the Nashville Academy of Medicine.

The profession is no exception to the very human rule that men are prone to obsession. We had not so long ago an ovarian obsession. We are just now recovering from a Wasserman and a Salvarsan obsession; and are at present in the midst of a thyroid and tonsil obsession. So we have been seized with an obsession, a strange unusual obsession of a negative sort relative to neurasthenia.

But dawn comes sooner or later and we return at last to our senses. We have gone finally to our logic and are asking ourselves whether there is any such thing as neurasthenia, as we formerly understood the word, and whether it is an idiopathic nothing or a group of symptoms growing out of lesions which, if we would seek, we might find, and, if we would attempt, we might relieve.

I am not recommending surgery as a cure-all for neurasthenia, but the situation looks at present as if we would be compelled to admit that we have restricted our efforts too narrowly here and that we might safely broaden our field of useful work, whereas in the case of our other obsessions already referred to we have been and are being compelled to narrow the field of work. If we have been over-enthusiastic on one side we are beginning to learn we have been too pessimistic on the other.

I have so far been using the word neurasthenic, not because it is to be considered as synonymous with ptosis, but because the neurasthenic symptoms so frequently associated with ptosis have been the chief deterrent factor from attempting surgical relief of ptosed conditions. It is not the purpose, however, to convey the impression that all neurasthenics have ptosis, although the percentage who have is enormous, or that all cases who have ptosis develop neurasthenia, although a large proportion of them do develop it: nor do I wish to suggest that neurasthenia is the only symptom complex that ptosed cases manifest. It is no argument to say that because all cases of ptosis do not show neurasthenia, the latter is not dependent upon the former.

or because all neurasthenics do not have ptosis, relief of ptosis would do no good. The same fallacious argument could be applied to every pathological process and its clinical manifestations.

Ptosis is a mechanical condition, a downward variation of the viscera, solid or hollow, from their normal anatomical position. This variance may be slight, medium or great, so that it is limited only by the confines of the abdomen. The degree of variation is so variable that the question has been raised wisely as to what the normal position of the abdominal viscera is, especially of the stomach. What limit of descensus may be considered the limit of normal range? Frankly, I do not know from the anatomical standpoint; however, I am inclined to think that any stomach that reaches below the navel and any transverse colon that approaches the symphysis pubis is at least at the lower limit of normal range. This, however, is an immaterial idea, a fruitless discussion: a more rational view from the therapeutical viewpoint is that so long as function remains normal we may permit the organs to occupy any position they may elect; but that when symptoms arise which distress or incapacitate the patient he is to be relieved if possible. We are, therefore, to base our conclusions not upon anatomical malpositions, but upon the amount of distress arising from such conditions, whether that distress be of a local or general character.

It is unnecessary for me to discuss etiology except to call attention to the fact that one chief element in its causation is postural, the price the human family has paid for forsaking its lowly station among the quadrupeds, that it is due to relaxation of the abdominal walls or a proportionately large lower abdomen as compared with the upper, which permits the viscera to sag, and to abnormally long attachments which are supposed to help maintain the organs in proper position and proper relation to each other. These three factors are the ones to be considered in surgical treat-

ment of ptosis and the latter two may be congenital or acquired.

The history of the various surgical efforts for the relief of symptoms arising in patients who have a movable kidney is interesting; it is a long story of varied and numerous plans for reposition and permanent maintenance of that position and of recurrences and failures so numerous that it palled upon us; and we finally not only almost forsook our efforts, but became rather positive in our condemnation of those who were rash enough to tell such a patient definitely what had been disclosed by examination. Do not understand me to condemn such operations without restriction. but the decrease in the number of them is a sufficient commentary on our former results. Why? Probably because we saw only a small fraction of the real pathology and of its real action as a local factor and of its reaction in a general way. We saw the fly, but the barn door on which he sat escaped us. Gradually from this we came to realize that it was not so much kidney that was responsible for the symptoms, but that it was ptosis, especially, of hollow organs, stomach and colon, and that the concomitant and sequential changes in function were really responsible for a much larger part of our symptoms than had been corrigible by reposition of the kidney alone. Skiagraphy has added materially to our knowledge of these cases and is an invaluable aid in our recognition not only of their presence but of their nature.

I think it would be safe to say in this connection that much of the failure to relieve symptoms associated with prolapse of the internal genital organs has been due not so much to faulty methods employed as to failure to recognize that these organs were only a part of the cause of the trouble. Hence, however perfectly their reposition might be, it would be but natural to expect relief only of the symptoms or that portion of them that was directly produced by their malposition.

The organs of especial interest are the stomach and the colon, and to these two the remainder of this discussion will be chiefly devoted. Let it be repeated that surgery is not advised or advisable for a symptomless malposition of these two viscera; but whether local or general, when symptoms do arise from their malposition, or from accidents following in the wake of such altered relations, surgery should be called to the rescue; and one has not far to seek, to be able to find that such a course is abundantly justified.

For practical purpose it is necessary to recognize Rovsing's subdivision of ptosis of the hollow viscera into virginal and maternal. The former has a narrow, slender, long chest and a moderately pendulous abdomen whose wall is firm and tense; she has ptosis because there is not room sufficient for the organs to maintain their place in the upper The maternal type has ptosis by virtue of numerous pregnancies, her lower abdomen has become so relaxed as to give an excess of room below. One case is produced by constriction above forcing the organs down; the other by dilatation below, allowing them to sag into the large pendulous, protruding, wrinkled soft lower abdomen. The former is the greater sufferer of the two by long odds, and the latter can, on the average, be corrected by much simpler means. Hence, there are two plans of treatment, I ought perhaps to say three plans, and I will mention the third one first. Owing to the fact that ulcer of the stomach, intestinal indigestion and nervous indigestion (whatever else that may embrace more than ptosis), are the diagnoses usually rendered in cases of gastroptosis, rest in bed and diet are prescribed with the most happy results, for these patients become comfortable and free of pain when they lie flat on their backs and a regime of diet and laxatives relieve their constipation and they are well; well, because they can have no ptosis when reclining. But so soon as they undertake normal posture and resume their vocation they begin the whole thing over. This is the first plan of treat-

ment and is mentioned only for condemnation. The second plan of treatment consists in restoring the increased dimensions of the enlarged lower zone of the abdomen to the normal size and thereby forcing the viscera to occupy a higher and more correct position. This is more applicable in the maternal type and little or not at all in the virginal type, for in the former there is room above that may easily be occupied; while in the latter, the very lack of space above is the cause of the condition. Now this reduction in the dimension of the lower abdomen may be accomplished in one of two ways, namely by compression with an abdominal belt, or by operation and reduction in the size of abdominal wall, by resection or overlapping of peritoneum and by overlapping the apponeuroses sufficiently to correct what repeated gestations have undone. I regret my inability to recall the name of the author who first suggested this plan of correction, but can unhesitatingly commend it as it has given splendid results in my hands in the few cases I have had occasion to employ it since first reading the author's description.

The third plan is that of fixing the stomach in its normal position by attaching it by some kind of support to the abdominal wall. The only plan so far that has appealed to me is that of Rovsing, who causes adhesions to form between the anterior wall of the stomach and the opposed parietal peritoneum. The plan of fixing the great omentum in such manner as to support the stomach has two serious drawbacks, one that it is a friable and often attenuated membrane of little supportive capacity; and second, that it makes traction from the bottom of the stomach upward, which would tend to rotate both stomach and transverse colon. Hence I have employed only the other method. It appears to me that one might be able to increase the dimensions of the upper abdomen at the same time the suspension is done, but so far this plan has not been attempted.

The colon may come into a ptosed position independently

of the stomach, but always more or less completely when gastroptosis is present. It may come down as a whole which doubtless occurs rather rarely, or in part; the segments more commonly involved being the hepatic flexure and the colon transversum, and these may come down jointly or independently. The displacements of the colon may be uncomplicated or they may result in complications which cripple the integrity of the large bowel from a structural standpoint, or impair its service by interference with function and at the same time increase its harmfulness. Hence it is easy to understand that while certain colons may be helped back to normal function by simply applying some . form of compression over the lower abdomen, such as was recommended for less severe cases of maternal gastroptosis, if the ptosis involves the stomach as well as the colon it were futile to undertake surgical reposition of the gut unless an effective fixation of the stomach in a high position is done at the same time. When, however, the hepatic flexure is down it should be stitched into normal position, and if it is down with the transverse colon the hepatic flexure is sutured in place and the gastro-colic ligament is narrowed in such manner as to bring these two organs into contact, and the sutures are so placed that they embrace a bit each of the fibrous coat of both viscera. In case the transverse colon only is down, this latter procedure is all that is required. I recently operated on a case in which the gastrocolic ligament was as much as seven inches at the widest point and had become so attenuated that it was filled with If the kidney is prolapsed in consieve-like openings. junction with the hepatic flexure, it must be remembered that when one must choose between the two, fixing one and leaving the other, the colon should be fixed. Both should be fixed if possible.

In case complications or sequella, near or remote, are present and of such nature that replacement will not alter their evil influences, then we pass from the field of ptosis into that unlimited domain which Lane, of London, has persistently pointed to as a source of so many ills, and to these still others are adding. Then resection of larger or smaller portions of colon becomes necessary, or short circuits must be done to afford relief. But this is beyond the domain of surgery for ptosis.

#### ENTEROPTOSIS.\*

BY W. A. OUGHTERSON, M.D., OF NASHVILLE, TENN.

By enteroptosis I have in mind a condition of the abdominal viscera occupying a position in the abdominal cavity lower than that seen in normal individuals.

The question may be asked just what is the position of the viscera in a normal individual, since many people enjoy excellent health with the stomach or other viscera quite low in the cavity, and it is difficult in many instances to determine just how much significance to attach to the lowered position of a given organ. Glenard called attention to its frequency and give the name enteroptosis to a clinical entity; further study of the subject while leading us to a conception somewhat different from that held by Glenard, nevertheless verifies most of his contentions. Virchow contended that a normal position of the abdominal organs in adults was rarely found at autopsy.

Etiology:—Stiller regarded the condition which he spoke of as splanchnoptosis making imperfect development; he found that it appeared in person having a special type of conformation or decubitus in which a weakened ligamentous apparatus was a prominent feature. Stiller was inclined to place the responsibility for the poor development upon a faulty nutrition incident to the malposition of the abdominal organs. Recent observations have demonstrated that the condition is much more frequent than was formerly supposed. Meinert's report shows that the ma-

<sup>\*</sup>Read at regular meeting of the Nashville Academy of Medicine.

jority of women suffered from gastroptosis while it was found only in five per cent of men. Many observers think this difference might be attributed to wearing apparel. My own observations have lead me to believe the condition is much more frequently met with in men than Meinert's report would indicate. Most observers claim the condition is rare before the tenth year; this observation has not been my experience, as I have met with the condition in children not infrequently; it is quite often seen in some whole families.

It was not unnatural to contend that tight dressing, corset wearing, was responsible for the preponderance of the deformity in women. Undoubtedly the continued wearing of apparel that constricts and weighs down the abdomen does contribute greatly to visceroptosis. It becomes evident, however, with increased study of the subject that there is in many cases a predisposition to the disease in certain individuals regardless of dress.

It was found there was faulty posture, a laxity of the abdominal walls lowering the intra-abdominal pressure which almost necessitated the downward displacement of the abdominal contents. Child bearing resulting in the stretching of the abdominal walls, many cases with pelvic floor tears, has long been regarded a factor, still if one will check over his cases, the condition will be found equally as frequent in women who have never borne children.

The fault has been referred to weakness of the abdominal ligamentous support. Stiller calls attention to the absence of the tenth costal cartilage in the enteroptotic which he regards as representing a feature of a wide spread defect in the ligamentous and cartilaginous support. It is quite evident that regardless of the influence of these supports, a downward displacement of the viscera is almost inevitable in the presence of ever-yielding and flabby abdominal walls and the lowering of intra-abdominal pressure which this affects. On the other hand, we find in many cases that one

organ has become displaced to a much greater degree than its neighbor; that undoubtedly occurs in individuals without the special conformity or decubitus referred to by Stiller, the fact of intra-abdominal pressure therefore is called into question at least in these cases. The question of faulty physical development as well as a strong abdominal wall must be considered as well as the habitual practice of keeping a correct posture. Not only an erect carriage, but the preservation of normal spinal curves. The majority of enteroptotic patients show postural defects that one must regard as characteristic of the condition.

The subject is important if somewhat complicated, yet there can be no question as to the need of familiarity with it if the various forms of ptosis are to receive proper preventive and curative measure.

There are two types of spinal deformity described as productive of visceral displacement: in the first there is an exaggerated dorsolumbar curve and a compensatory exaggerating backward lumbar curve. This results in a shortening of the abdominal cavity and throwing the lower part of the abdomen outward, so that it protrudes at the same time the head and cervical spine bend forward, thus elongating the cervical fascia which normally sustains the diaphragm in position. As a result of lengthening the fascia the dome of the diaphragm descends; being sustained at its cardiac end by the diaphragm, the stomach necessarily falls with the depression of the former. As a result of these mechanical deficiencies acting conjointly, there comes about ptosis of all the abdominal viscera. With a continuation of this condition and further weakening of the abdominal muscle, the outward pressure of the abdominal viscera is added until very little support is afforded to the abdominal contents.

Another type of defective spinal posture and poise is seen in those in whom there is almost complete absence of the normal dorsolumbar curve with bending forward of the head and cervical spine and a forward drop of the shoulders, as in the other condition there is a slackening of the cervical fascia, relaxation of the abdominal wall and visceroptosis.

In both these types the relation of the viscera are so deranged that a large part of the support supplied by the shelflike arrangement at the back of the abdominal cavity is lost.

This shelf-like support has been studied by a large number of anatomists and clinicians and its importance fully recognized, and when this anatomical relation has been lost ptosis becomes an easy matter.

When one attempts to correct a condition of this kind, in many cases he is confronted with not only visceroptosis, but often a flat chest, round shoulders, weak back, illiosacral relaxation, pronation of the ankles, flat feet, retarded circulation, general suboxidation, and God only knows the train of symptoms generally summed up: Neuresthenia arises, which, like rheumatism, is an antiquated blanket for the cover of ignorance and should only be regarded as a symptom of some underlying malady.

One feature of the malady we must always keep in mind; a slight displacement may cause serious inconvenience, while a marked displacement may cause no symptoms whatever. This I believe explains the wide discrepancy in the minds of the profession; the remark is often made by many men that the slight displacement present could not possibly explain the train of symptoms, while others attribute all otherwise obscure symptoms to almost any degree of visceroptosis that may be found. Much has been written about the importance of the action of the toxines of the various forms of tubercular infections resulting in ligamentous relaxation, a factor which cannot be ignored; over-eating, constipation, chronic appendicitis, chronic gall bladder infections with their resulting toxemias must be considered as factors in some cases. Syphilis must always be kept in mind. Chronic intestinal obstruction resulting from old inflammatory processes, with adhesions and their resulting contractures, chronic colitis, any long standing chronic condition bringing about a state of mal-nutrition with muscular and ligamentous relaxation can, to my mind, lay the foundation for a visceroptosis, especially in people with an inherited predisposition, especially those of frail type.

Symptoms:—In reviewing the histories of some thirty cases the commonest complaint was fluttering of the heart. This is especially seen at an age when cardio-vascular changes are prone to occur, but common in young individuals; gaseous distention after meals, feeling of fullness, nervousness, headache, which may be more or less persistent, or take on the nature of migraine attacks; constipation, a common complication; all sorts of vague pains in all parts of the body; the pains about the abdomen very often leave one in much doubt as to the presence of appendicitis and gall bladder disease; this is especially true in ptosis of the colon associated with a mucous colitis. In the case of gastroptosis the question of ulcer is the ever present problem to decide; the long standing history of indigestion, together with sour, acid eructations as is often seen, together with the relief afforded by taking food, tender epigastrium, loss of weight due to long standing indigestion, and mal assimilation; in short, many cases present all the phenomena of duodenal ulcer. Many patients complain of a gradual loss of weight over a period of several years, stating that it makes no difference how much they eat they cannot gain flesh and strength; anemia becomes a factor in this class of cases.

A patient seen recently gave the following complaint: Headache, loss of appetite, gaseous indigestion, everything she ate causes distress, heart fluttered and was sure she had serious organic heart disease. She had pain in the region of the gall bladder, pain in the region of the appendix, pain in the region of the kidneys, in the pelvis; hands, arms, feet and legs grew numb and tingled, the numbness causing much distress at night, many times kept patient

awake, was extremely nervous; everything annoyed her that she thought a normal individual should not notice, easily tired, constipated, desire to urinate frequently, in other words presented the symptoms of a typical neurasthenic. She stated it was so far from her normal state to be in such condition, she thought there must be something radically wrong. This is the type of person we stamp a typical neurasthenic and send her to Battle Creek, or any other place to get rid of her.

I do not consider this the time or place to consider neurasthenia, but the more I see of the symptom—complex neurasthenia, the more I am convinced it is only a symptom of an underlying pathologic state. In my experience visceroptotic furnishes by far the largest number.

Gastroptosis is usually easily demonstrated in the thin walled individual, simple inflamation will serve in the majority of cases; where the belly wall is exceptionally thick the bismuth and X-ray will be required. The type of case seen with a cecum in the pelvis, sagging of the transverse colon with the acute angle at the splenic and hepatic flexures, the sagging of the sigmoid with the attending incomplete obstruction, or so called intestinal stasis, is a complex problem to deal with. Here the X-ray picture of the colon injected with bismuth will usually serve to clear up the diagnosis.

A word about the kidney. I have not been impressed with the importance of floating kidney to the same degree that some observers have called to our attention. It is quite true we do see kidneys that slipped away from their mooring and cause much trouble in the way of pain, often colicy in character or simple backache, heaviness in the lumbar region, occasionally some bleeding. The matter of course often becomes a serious one when the ureter becomes kinked and to stitch up such kidneys leaving the balance of the abdominal visecra hanging in an abnormal position will frequently be followed by disappointment.

I shall not attempt to discuss the treatment, except to say when all of the etiological factors have been considered it seems to me reasonable to assume that the treatment does not belong to medicine alone, in fact very little can be offered in the way of a cure, the general surgeon and the orthopedic surgeon both may justly claim a fruitful field for their work.

## Pbitnary.

AUSTIN FLINT, M.D., LL.D., of New York, N. Y.

We greatly regret to learn of the sudden death of this noted Physiologist and Alienist at the age of 79. He was found dead in his home Sept. 22d, ult., apoplexy being the cause. His monumental work on "The Physiology of Man," in five volumes, and his "Text-Boook on Physiology" of more than a fourth of a century ago, together with his prominence as a teacher of Physiology in the Bellevue Hospital Medical School marked him as an able son of a most able sire, who was so long and favorably known both at home and abroad as one of the most distinguished and progressive teachers and writers on Internal Medicine, and whose voluminous writings had in their day an international standing of high degree.

The distinguished physiologist was a graduate of Jefferson Medical College, 1875. He was Professor Emeritus of Cornell Univ. Med. College; Consulting Physician Bellevue Hospital; President of the Consulting Board of the Manhattan State Hospital for the Insane; Member of the N. Y. State Medical Society and the American Medical Association.

His son, Austin Flint, Jr., F. A. C. S., is professor of Obstetrics and Clinical Gynecology in Bellevue Hosp. Med. College, in addition to holding other appointments in the leading medical and surgical institutions of New York City,

as well as membership in local, State and national associations, and bids fair to follow in the footsteps of his noted sire and grand sire.

### URIAH L. TAYLOR, M.D., of Columbia, Ky.

Dr. Taylor was born in Adair County, Ky., a little more than 80 years ago, and was a graduate of the Medical Department of the University of Louisville, 1875. For a number of years he has very efficiently served the citizens of his native county and state as Health Officer of Adair County. adding greatly by his personality and energy to the improved sanitary conditions of the section in which he lived. A prominent feature of his work was in frequent visits to the public schools, lecturing and practically teaching the principles of sanitation and hygiene, both personal and in the home. Being on a visit at the time of his death to that part of Kentucky which he had served so faithfully and so well, we can testify to the universal esteem, love and respect held for him by his professional colleagues, his neighbors and the citizens universally. By strict adherence to temperance in all things, he was enabled to actively engage in his professional duties until the hour of his sudden death, which resulted from heart disease.

PITUITRIN AND MILK SECRETION:—In the American Journal of Physiology of February 1, 1915, Simpson and Hill, as the result of an experimental research, state that the administration of pituitrin, by intravenous, intramuscular or subcutaneous injection, to a lactating animal leads to a marked increase in the quantity of milk secreted and also in its fat content. In the goat, if the injection be continued at intervals over a prolonged period—several months—immunity to its action on the mammary glands appears to be established both in regard to the amount of milk yielded and the percentage of fat it contains.

## Editorial.

#### MEDICAL EDUCATION IN THE UNITED STATES.

In "A Review of Fifteen Years of Medical Progress," in the Jour. A. M. A., Aug. 21st, ult., we find the following statements, given for the year ending June 30, 1915:

"The total number of medical students (matriculants) in the United States, excluding premedical, special and postgraduate students, was 14,891, a decrease of 1,611 below last year, a decrease of 2124 below 1913, a decrease of 3,521 below 1912 and a decrease of 13,251 (47.1 per cent.) below 1904, when 28,142, the highest number of students, were enrolled. Of the total number of students, 13,914 were in attendance at the non-sectarian colleges, 736 at the homeopathic and 241 at the eclectic colleges. The attendance at the non-sectarian colleges shows a decrease of 1,524 below that of last year, and a decrease of 11,016 (44.2 per cent.) below 1903, when 24,930, the largest number of non-sectarian students, were enrolled. In the homeopathic colleges there was a decrease of 58 below the attendance of last year, and a decrease of 1,173 (61.4 per cent.) below 1900, when 1,909, the largest number of homeopathic students, were enrolled. The eclectic colleges show a decrease of 29 below the registration of last year, and a decrease of 773 (76.2 per cent.) below 1904, when 1,014, the largest number of eclectic students, were enrolled.

"The unusual decrease in the number of students this year was due to the enforcement, for the first time by thirty-nine medical colleges, of higher entrance standards—one or two years of preliminary collegiate work.

"The total number of graduates was 3,536, a decrease of only 58 below 1914, and a decrease of 445 below 1913. The total this year is 2,211 (38.8 per cent.) less than in 1904, when 5,747, the largest number, were graduated.

"The number of graduates from the non-sectarian colleges was 3,286, or 84 less than last year, and 393 less than in 1913. It is a decrease of 1,904 (36.6 per cent.) below 1904, when 5,190, the largest number were graduated from non-sectarian colleges. From the homeopathic colleges there were 195 graduates, or 41 more than in 1914, and 14 less than in 1913. It is a decrease of 225 (53.6 per cent.) below 1903, when 420, the largest number of homeopathic physicians, were graduated. The eclectic colleges graduated 55, or 15 less than last year, and 38 less than in 1913. It is a decrease of 166 (75.1 per cent.) below 1890, when 221, the largest number of eclectic physicians, were graduated.

"Of the 3,536 medical graduates, 858, or 24.3 per cent., were reported to hold degrees in arts or science, as compared with 22.5 per cent. last year, 18.9 per cent. in 1913, 17 per cent. in 1912, and 15.3 per cent. in 1910. Of the 858 graduates holding baccalaureate degrees, 131 came from Illinois colleges, 107 from New York, 95 from Maryland, 92 from Massachusetts, and 74 from Pennsylvania.

"During the year there were 592 women studying medicine, or 39 less than last year, a decrease of 48 below 1913, and a decrease of 537 (47.6 per cent.) below 1904, when 1,129 women students, the largest number, were reported. The percentage of all medical students was 4, or slightly larger than last year. There were 130 women gaduates this year, 9 more than last year, or 3.7 per cent. of all graduates. Of all the women matriculants, 116 (19.6 per cent.) were in attendance at the two medical colleges for women, while the remaining 462 (80.4 per cent.) were matriculated in the 53 coeducational colleges. From the two women's colleges, there were 38, or 29.2 per cent., of all women graduates, while 92, or 70.8 per cent., secured their degrees from coeducational colleges.

"There are now 95 medical colleges; 83 non-sectarian, 8 homeopathic and 4 eclectic. New Work State has 10 colleges, Illinois 8, Pennsylvania 7, and California 6. Chicago has 8; New York, 7; Philadelphia, 6; Boston, 4; San Francisco, 3; St. Louis, 3; Washington, 3, and there are 2 colleges each in Ann Arbor, Baltimore, Cincinnati, Columbus, Iowa City, Los Angeles, and Omaha.

"The six colleges having the largest enrollments are Jefferson Medical College, 556; Chicago College of Medicine and Surgery, 529; Rush Medical College, 487; Bennett Medical College, 393; Columbia University, College of Physicians and Surgeons, 381, and the University and Bellevue Hospital Medical College, 364. Illinois has the largest number of students, 2,213, followed by New York with 2,117 and Pennsylvania with 1,458."

In the State of Tennessee, where at one time there were as many as ten or more, there are now but three, The Vanderbilt University Med. Department, as Nashville; The Medical Department University of Tennessee, at Memphis; and The Meharry Medical College, at Nashville, the last named being for colored students.

ANTIPHLOGISTINE acts, through the cutaneous nerves upon the inflamed area, as a powerful stimulant to the blood-vessels and lympathics, promoting elimination of morbific products. It supplies, by natural, physiologic processes, regenerative material to the parts already suffering from that condition of perverted nutrition, which is a part of the inflammatory process.

#### A NEW REMEDY IN THE TREATMENT OF HEMORRHOIDS.

Dr. E. H. Terrell, of Richmond, Va., in the Va. Med. Semi-Monthly, June 21st, ult., published an article on The Injection of Bimuriate of Quinine and Urea in the Treatment of Hemorrhoids. In the discussion of his paper at the regular meeting of the Richmond Academy of Medicine, June 8th, 1915, Dr. M. D. Hoge said that Dr. Terrell informed him several months previously of his experiments with bimuriate of quinine and urea in the treatment of hemorrhoids, and that since that time he has used a 5-per cent. solution successfully in two cases.

Dr. Hodges said that Dr. Terrell had discussed the treatment with him also. He asked Dr. Terrell if there is as much danger of thrombus from its use as from that of carbolic acid. Incidentally he spoke of good results following its injection in several cases of neuritis.

Dr. Horsley said that Dr. Terrell's work along this line is excellent and is founded on good pathology. He does not believe that bimuriate of quinine with urea is a good anaesthetic because it prevents good healing; but in 4- or 5-per cent. solution it produces fibrosis. It is not toxic because it is so often given for constitutional effects in malaria. This attribute of causing fibrosis makes it unique, and if Dr. Terrell's investigations bear it out, it would be an almost ideal remedy in the treatment of a certain class of hemorrhoids.

Dr. Terrell, closing the discussion, said that the strength of the solution should be varied according to certain indications. These he is trying to ascertain by further experimentation. So far, solutions of from 1 to 10 per cent., or stronger, have been used. His usual method is to inject one pile each succeeding day until all have been treated. Usually one treatment for each hemorrhoid is sufficient. Sometimes two and, occasionally, three treatments may be necessary. The remedy should not be used in inflamed or strangulated hemorrhoids. It is best suited to the chronic variety that prolapse easily and have to be replaced. In ulcerating, bleeding hemorrhoids, this treatment controls the bleeding almost at once.

In about three days after a hemorrhoid is treated by this method it appears hard and fibrous. In ten days there is a marked diminution in size. In from three to four weeks it has usually disappeared altogether. Dr. Terrell has seen no unfavorable symptoms and prefers this form of treatment to operation, because the parts are left in a more natural state. Following operation, there remains a certain amount of scar-tissue which, contracting, narrows the lumen of the anus, interfering more or less with the natural function of the parts.

# EXAMINATION OF CANDIDATES FOR ASSISTANT SURGEON. United States Public Health Service.

Boards will be convened at the Bureau of Public Health Service, 3 "B" Street, S. E., Washington, D. C., and at the Marine Hospitals of Boston, Mass., New York, N. Y., Chicago, Ill.; St. Louis, Mo., Louisville, Ky., New Orleans, La., and San Francisco, Cal., on Monday, November 1, 1915, at 10 o'clock A.M., for the purpose of examining candidates for admission to the grade of Assistant Surgeon in the Public Health Service.

Candidates must be between 23 and 32 years of age, graduates of a reputable medical college, and must furnish testimonials from two responsible persons as to their professional and moral character. Credit will be given in the examination for service in hospitals for the insane or experience in the detection of mental diseases. Candidates must have had one year's hospital experience or two years' professional work.

Candidates must be not less than 5 feet, 4 inches, nor more than 6 feet, 2 inches, in height, with relatively corresponding weights.

The following is the order of examination: 1, Physical; 2, Oral; 3, Written; 4, Clinical.

Candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate.

Examinations are chiefly in writing and begin with a short autobiography of the candidate. The remainder of the written exercise covers the various branches of medicine, surgery, and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and natural sciences.

The clinical examination is conducted at a hospital.

The examination usually covers a period of about ten days.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order. They will receive early appointments.

After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon. Passed Assistant Surgeons after twelve years' service are entitled to examination to the grade of Surgeon.

Assistant Surgeons receive \$2,000, passed assistant surgeons \$2,400, surgeons \$3,000, senior surgeons \$3,500, and assistant surgeon-generals \$4,000 a year. When quarters are not provided, commutation at the rate of \$30, \$40, and \$50 a month, according to the grade, is allowed.

All grades receive longevity pay, 10 per cent in addition to the regular salary for every five years up to 40 per cent after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For invitation to appear before the board of examiners, address "Surgeon-General, Public Health Service, Washington, D. C."

INTESTINAL TOXEMIA:—The investigations of Metchnikoff and Schmidt, together with the later studies of Lane, Jordan and many others have laid such emphasis on the evils resulting from intestinal stasis that it is at last recognized that no small proportion of the diseases afflicting the human family are directly attributable to faulty elimination of the intestinal accumulations in the lower bowel. For a long time, to be sure, the evils of chronic constipation have been realized, but it is doubtful if, until Lane began to speak of the large intestine as the "cesspool of the human body," the dangers of intestinal putrefaction were fully appreciated.

It is hardly probable that Lane's radical treatment of "short circuiting" the bowel—the removal of three to eight feet of intestine—will ever be popular and simpler measures will unquestionably hold a definite place in the management of intestinal stasis for some time to come.

Many and various are the remedies that have been employed with more or less success, but among recent remedies brought forward for accomplishing intestinal elimination, and, what is often of even greater importance, the removal of certain local intestinal conditions contributory to, or the result of the bowel stasis, Prunoids unquestionably stands first. This unique combination of phenolphthalein and other carefully selected drugs has been found an evacuant of exceptional value. Its effects are prompt and certain, with none of the iniquities of the commonly used laxatives and cathartics. Prunoids do not gripe nor occasion the slightest discomfort, although they produce very copious movements. Most important of all, however, is the physiologic effect on the intestinal glands and muscular tissue that follows their systematic use. Unlike most cathartics, the reactionary effect never tends to increase the constipation. One effective dose is often followed by regular movements for several successive days, and used routinely, in the absence of organic causes, gradual diminution and at last complete cessation of the remedy is always possible; in other words a more or less permanent correction of the constipation is an almost invariable result.

Such a preparation, with its broad field of satisfactory application, cannot fail to appeal to the zealous physician. Any medical man who is not familiar with the exceptional clinical value of Prunoids, is urged to write for samples to the Sultan Drug Company, Saint Louis, Mo.

BACTERIAL-VACCINE THERAPY:—The treatment of infectious diseases with preparations derived from corresponding micro-organisms long since passed the experimental stage, and bacterial vaccines may be said to occupy an assured place in therapeutics. These vaccines, as is doubtless well known to most physicians, are suspensions, in physiologic salt solution, of killed bacteria. An important effect of their administration is to raise the destructive power of the patient's leucocytes against the specific living invaders. Injected into the human organism, bacterial vaccines have an effect similar to that produced on the horse by the introduction of toxins or killed cultures: they cause active immunity. In other words, the administration of a dose of bacterial vaccine stimulates the patient to produce an additional supply of antibodies, thus enabling him to resist the dinsease.

Bacterial vaccines have several advantages over the ordinary forms of medication. They are determinate or specific in the respective infections in which they are indicated. Their employment relieves the patient of the necessity of frequent "dosing." Being administered by the physician, or under his direct supervision, they enable him wholly to control his cases.

Some idea of the scope which bacterial-vaccine therapy has come to assume may be gathered from an announcement which Parke, Davis & Co. are making in current medical journals and which physicians will do well to consult. Twenty-three vaccines are listed in the advertisement. They are supplied in 1-Cc. glass syringes, 1-Cc. glass bulbs, 5-Cc. vials and 30-Cc. bottles, all sealed in a manner that guarantees the sterility of their contents. The syringes are designed for the use of physicians who desire to inject the fluid without first removing it from the original container.

Parke, Davis & Co.'s bacterial vaccines are scientifically prepared, and precise therapeutic results may be confidently expected from their administration.

A WISCONSIN PHYSICIAN REPORTS: "For 30 years I have constantly prescribed Tongaline with successful results and have found it most beneficial for all rheumatic and gouty conditions, as also a powerful tonic and eliminant. While there may be many so called imitations of Tongaline, there is none which approaches it in therapeutic efficacy."

VARICOSE ULCERS:—Every practitioner of experience has come across them, those exasperating, nonhealing, inflamed legs, for which legions of remedies have been recommended. When another suggestion is added the writer wishes to state that he has just treated three cases successfully by the method described here.

The first requisite is the allaying of the pain, and this is done by painting the ulcer with a 10% cocaine solution followed by dusting with iodoform or airol. To the surrounding eczematous skin the following should be applied: R. Sander's Eucalyptol. 1/2 dr.: Ung. Zinci Oxidi, 1 oz. The proportion of Sander's Eucalyptol should be gradually increased until 2 dr. to 1 oz. of zinc ointment is used. As soon as it can be borne the ulcer itself should be painted with the pure Sander Eucalyptol. This should be allowed to evaporate and followed by dusting with iodoform or airol. Sander's Eucalyptol disinfects and stimulates epithelization, whilst the iodoform or airol gives the necessary freedom from pain. Wherever the inflammation is not too intense a quicker result can be obtained by painting the surrounding inflamed skin with the pure Sander Eucalyptol and following with the zinc ointment. Rest in bed is necessary in all bad cases, and the inflamed parts should be covered with linen (not lint) over which sufficient wool is placed and a bandage loosely applied.

It is essential to specify Sander's Eucalyptol, as intense aggravation of the inflammatory condition has followed the application of unspecified eucalyptus products. In the supreme Court of Victoria, Australia, a sworn witness testified that the ulcer from which he was suffering was made much worse by such an irritating product, whilst the application of the genuine Sander Eucalyptol brought about a cure. Such testimony is not to be lightly rejected when the physician has his reputation and the welfare of his patient at stake.

THE AFTER CARE OF CHILDREN'S ILLS:—With the advent of school-days, and the daily association of many children in the class room, the contagious diseases of childhood develop and multiply. The exanthema, as well as diphtheria, whooping cough, etc., comprise a considerable proportion of the diseases that the family physician is called upon to treat during the late Fall and Winter months. The robust child, with but a mild infection, frequently recovers quickly and, perhaps, requires but little attention during the convalescent period, while the child whose general nutrition is "below par" usually emerges from the acute attack with a condition of Anemia and general vital depreciation. In the large majority of cases, it is undoubtedly wise to encourage and hasten convalescence by means of a palatable and efficient hematinic and general tonic. For this purpose Pepto-Mangan (Gude)

is especially valuable. All children like it and take it readily; it does not irritate the digestive organs, but, to the contrary, increases the appetite and assists in the absorption and assimilation of the child's nourishment. As it is non-astringent, it does not, as other ferruginous remedies do, cause or increase constipation. As Pepto-Mangan is prompt and efficient as a blood builder and general reconstructive, it should be preferred among children whenever medication of a general tonic nature is indicated.

BEFORE AND AFTER CHILDBIRTH:—Childbirth is always attended by more or less danger and discomfort. Too often the extra burden a prospective mother has to bear overtaxes her nutrition and strength.

The mother who nurses her baby also frequently has to have supportive treatment to enable her to meet the demand placed on her bodily metabolism by the needs of her growing offspring. At such times of stress effective tonic treatment is always required and clinical experience has clearly shown that no remedy is so serviceable from every standpoint as Gray's Glycerine Tonic Comp.

Used throughout the later months of pregnancy and during the puerperium, it gives to the mother the exact stimulus and support needed not only to carry her through a trying period but to fit her for the still more exacting one of lactation.

Free from contraindication, it is the one remedy that the practitioner can employ before and after parturition with absolute certainty that its effects will never be harmful but invariably beneficial and helpful.

"THE MEDICINAL TROCAR IN DROPSICAL EFFUSION" is the descriptive phrase used by the manufacturers of Anedemin to explain its purpose and action in the treatment of all forms of dropsy resulting from the heart, liver and kidneys.

Anedemin is indicated in cases of ascites, anasarca, Bright's disease, nephritis, cirrhosis and valvular disturbances, and those other conditions accompanied by forms of edema. It is a prompt and positive hydragogue and an efficient diuretic—is an ideal cardiac tonic. Can be pushed to a finish—is non-toxic and not cumulative. The formula of Anedemin includes apocynum cannabinum, urginea scilla, strophanthus hispidus and sambucus. Complete formula given. Samples of Anedemin with interesting reports and literature will be mailed physicians on request to manufacturers, Anedemin Chemical Co., Chattanooga, Tenn. Anedemin is packed in sealed tins containing 100 tablets and with both wholesale and retail druggists throughout the United States.

THE VALUE OF GLYCO-THYMOLINE IN TREATING INTESTINAL DISTURBANCES:—The condition of the alimentary canal in all diseases of that tract is one of either congestion or depletion of the villi.

Auto-intoxication follows a condition of depletion and while this condition is not the direct cause of the "self-poisoning" the restoration to normal conditions would undoubtedly prevent septic absorption.

The condition in diarrhoeal diseases is one of stasis with a great amount of exudation of serum, the villi being greatly distended.

In either case a return to normal conditions is most readily effected by an agent producing an exosmotic action—in the one case to deplete and in the other to promote the exudation necessary to wash out the intestines and prevent auto-infection.

That Glyco-Thymoline will do this effectively has been demonstrated time and time again—and many clinical reports from many physicians testify to its great power as a curative agent in all such cases.

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

FLIES AND DIARRHEAL DISEASE:—The Bureau of Public Health and Hygiene of the New York Association for Improving the Condition of the Poor has issued a special publication entitled, "Flies and Diarrheal Disease," descriptive of its three months' study in the homes of over a thousand infants in New York City on the relation of flies and diarrheal disease. Special attention has been given such influencing factors as dirt and artificial feeding, and their relative importance determined. A full description of the study with its important conclusions may be obtained by request from Philip S. Platt, Superintendent of the Bureau, 105 East 22d St., New York, N. Y.

AN EFFICIENT SOMNIFACIENT:—The great disadvantage attaching to most agents used to produce sleep is that the patient suffers from their untoward effects. This does not apply to *Pasadyne* (Daniel) in any manner at all, and yet it possesses somnifacient properties in a marked degree.

Pasadyne (Daniel) may be depended upon to fulfilfil the purpose for which it is given, and owing to its freedom from disagreeable properties, it is of special value in the nervousness and insomnia of women.

A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Georgia.

A GOOD THING FOR THE DOCTOR:—The United Retail Merchants' Association, after due investigation for a Fountain Pen that would prove "trouble-proof" and "fool-proof," and that would insure writing promptness, writing effectiveness and permanency, inadvertently discovered the Laughlin Safety Self-Filler, as the one above all others, that deserved supremacy, and should be proclaimed throughout the cities and towns represented by this organization and pushed and sold by all dealers in such territory.—J. E. Foster, Secretary of the United Retail Merchants' Association of Detroit, Michigan.

COD LIVER OIL IN CHLOROTIC CHILDREN:—It has been found by actual clinical test that the administration of a palatable cod liver oil product is of the utmost advantage in building up chlorotic children. For this purpose Cord. Ext. Ol. Morrhuae Comp. (Hagee) is of particular merit since it not only possesses the qualities requisite in overcoming an impoverished condition of the blood-stream but is palatable and does not disturb the stomach, for which reasons it may be continued over long periods of time.

THE NATIONAL COMMITTEE FOR THE PREVENTION OF BLINDNESS solicits names for its mailing lists. By addressing the committee at Room, 510, 130 East 22d Street, New York City, any physician can receive its publications on such subjects as: Babies' Sore Eyes, Midwives, Trachoma, Iudustrial Accidents, Wood Alcohol Poisoning, General Subject of Prevention of Blindness, Illumination, Eyes of Children, General Care of Eyes, Exhibits, Lectures, Lantern Slides. Reports.

A WOMAN PHYSICIAN REPORTS: "I have personally derived great benefit from Tongaline & Lithia Tablets for rheumatism in the right arm and left limb." AMERICAN MEDICAL EDITORS' ASSOCIATION:—The annual meeting of this Association will be held at the McAlpin Hotel, New York City, on October 18 and 19, under the presidency of H. Edwin Lewis, M.D., editor of American Medicine. An interesting program has been prepared upon important subjects of interest to every medical editor in this country. The annual banquet will be held at the McAlpin Hotel on the evening of October 19.

## Selections

THE SCHICK TEST:—The New York Medical Journal has an editorial discussion of this useful reaction. It points out that the object of the Schick test, which is an intracutaneous and not a subcutaneous test, is to detect susceptibility or immunity to diphtheria. The technic may be as follows: One-fiftieth of the minimal lethal dose of diptheria toxin for a guinea pig is diluted up to 0.1 c.c. of fluid and is injected into and not underneath the skin, a small hypodermic needle with a platinum point being used. A raised whitish spot about the size of a halfdollar is formed. twenty-four to forty-eight hours, the test proves either positive or negative. If positive, it means that the patient or individual is susceptible to diphtheria, in which case there appears a reddish blue coloration of the elevation about the point of injection, and an accompanying slight edema, which usually disappears in about forty-eight hours, but leaves a slight pigmentation. A negative reaction means that the individual is apparently immune to diphtheria at the time of the test; and as a consequence the charactistic reaction just described does not occur. In some cases we may have a false reaction so that a second injection is indicated. It is said that the false reaction is due to the broth and probably occurs in two or perhaps three per cent of the cases.

What is the interpretation of this test? It has been found that the blood of many normal individuals (according to Schick 93 per cent of the newborn, 57 per cent up to one

year of age, 37 per cent from two to five years of age, and 50 per cent from five to fifteen years of age) contains diphtheria antitoxin in sufficient quantities to give natural protection or immunity. It would be useless to inject antitoxin into the system of persons whom we know to be insusceptible, and it was the original object of the test to determine the susceptible and the insusceptible individuals so that proper administration of antitoxin could then be carried on in a thoroughly scientific manner.

The Schick test is of great value in the detection of susceptible individuals during a diphtheria epidemic. should be a guide for the injection of prophylactic of immunizing doses of diphtheria antitoxin, and thus aid us to avoid both expense and trouble when such treatment is not nec-But this test has been found of even greater usefulness. It has proved of value in the direct treatment of diphtheria. It is useful in the determination of the curative doses of antitoxin. The chief effect of the injection of antitoxin is its protective influence against new toxin entering the system following the antitoxin inoculation. Schick and his co-workers found that a quanity of antitoxin representing 100 units of antitoxin to each kilogram of body weight has the greatest possible effect on any toxin which may subsequently (to the injection of the antitoxin) find its way into the system, and that an amount of antitoxin corresponding to 500 units to each kilogram produces the normal antitoxin effect, whether the toxin is injected at the same time as the antitoxin or twenty-four hours later. a result of his findings, Schick advises that antitoxin be injected as early as possible, and preferably intramuscularly. With respect to the dose, he finds that a single injection of 100 units to each kilogram of body weight is sufficient for mild and moderately severe cases; in more severe cases he advises a dose corresponding to 500 units to each kilogram. The Schick test was employed in these experiments to determine individual degrees of susceptibility or immunity.

Schick further finds that persons exposed to and not immune to diphtheria (this susceptibility having been determined by his test) receive all the antitoxin that is necessary when the dose corresponds to fifty units to each kilogram of body weight. It has also been observed that there is not much retroactive effect from the administration of antitoxin. This, no doubt, is the cause of fatal cases or unsuccessfully treated cases.

A conclusion of the greatest importance arrived at by Schick as a result of the work is this: A single dose of the properly determined quantity is all that is necessary, repetition of the injection being unnecessary or of no value unless an under dose has been previously given, in which instance the dose advised for the severest cases should be given. Remembering that one kilogram is equal to about two and a fifth pounds, accuracy in administration can not be too carefully observed.

The advantages of this test are numerous; among the most important, we may enumerate the saving in expense, the saving in inconvenience, the prevention of unnecessary serum reactions, the exact prophylactic and curative dose obtainable, and the general lifting of the problem of antitoxin administration into a higher plane.

CONCERNING RHEUMATISM AND GOUT:—Of course, it is a fact that the term rheumatism is ambiguous, and to a large extent misleading. It is not really known exactly what rheumatism is. In the *Medical Press and Circular* of June 2, 1915, the subject is dealt with editorially in an interesting manner. It is pointed out that to define rheumatism correctly is about as difficult as to define truth. The definition of rheumatism must take a negative form, or is an uninforming negative. The realization of what rheumatism is not is beginning to impress itself upon the medical profession, and we can only hope to arrive at an accurate

comprehnsion of the matter by a process of gradual exclusion, that is, if we ever do arrive at this goal.

According to this writer rheumatism has nothing to do with acute rheumatism or rheumatic fever. It has nothing to do with what the French call "arthritisme." a term which by a topsy-turvy process is used to describe all or any of the manifestations of rheumatism save only the arthritic, which are specifically excluded. Rheumatism has nothing to do whatever with uric acid, a senseless bogy, our contemporary says, badly designed by sad and silly herbivora to frighten the active and careless carnivora. Rheumatism has nothing to do with chorea, tonsillitis, subcutanous nodules, or erythema nodosum, all of which are said to have a real but hitherto unexplained relationship to acute rheumatism. It may be that the only connection between them is the sinister power common to them all, of giving rise to endocarditis, a relationship which is not real, but apparent only.

The entire editorial is a trenchant criticism of the hopeless muddle into which the true meaning and the terminology of the condition or conditions known as rheumatism has been brought. Sydenham is quoted as almost the sole authority on gout, and the writer of the editorial avers that the real kernel of Sydenham's classical and immortal description has been missed. Sydenham says that "great eaters are liable to gout, and of these the costive more especially." while in a previous part of his treatise he had declared that gout was due to "a vice of metabolism." The "costive" points unmistakably to the seat of the vice of metabolism, which is rather a vice of excretion than of metabolism. Intestinal stasis, bringing about ailmentary toxemia and absorption of chemical poisons and bacteria into the circulation, may be the cause of gout and rheumatism, both, taking these terms in their generally accepted meaning. The author concludes that after Sydenham, the only other authoritative writer on gout is Arbuthnot Lane.

That the latter did not realize that he was more than half solving the problem detracts nothing from the value of his contribution. Some day there will arise a third writer who will still further clarify this jelly, and this he will do by means of an internal secretion.

There is a good deal of valuable suggestion in this prophecy. If intestinal stasis be long continued it is reasonable to suppose that alimentary toxemia will supervene; toxins may then be absorbed into the blood stream from the colon, and this may be the predominant factor in the causation of gout and of some phases of that condition denominated rheumatism. The day may dawn when the advocates of the intestinal stasis theory will be regarded in the light of true prophets—or their views may be forgotten or remembered only as one of the curiosities or absurdities of a past age.—Med. Record.

VITAL STATISTICS AS TO DOCTORS:—During 1914, 2,205 physicians died in the United States and Canada. Reckoning on a conservative estimate of 153,000 physicians, this is equivalent to an annual death rate of 14.41 per thousand. The average annual mortality for physicians from 1902 to 1914, inclusive, was 15.71 per thousand. The chief death causes in the order named were senility, heart diseases, cerebral hemorrhage, pneumonia, accident and nephritis. The age of death varied from twenty-three to ninety years, with an average of sixty years, eleven months and six days. The general average of age at death since 1904 is fifty-nine years, nine months and nineteen days. The number of years of practice varied from one to seventy-five, the average being thirty-three years, nine months and twenty-nine days.

Sixty-one were between the ages of twenty-three and thirty, 100 between thirty-one and forty, 319 between forty-one and fifty, 432 between fifty-one and sixty, 477 between sixty-one and seventy, 404 between seventy-one and eighty,

193 between eighty-one and ninety, while twenty-one were more than ninety years of age. The greatest mortality occurred at the age of sixty-two, when sixty-eight deaths were recorded, at seventy with sixty-one deaths, at fifty-nine with fifty-nine deaths, at fifty-four and fifty-five with fifty-eight deaths each, at seventy-four with fifty-four deaths and at sixty-nine, when fifty-one died. There were seven deaths each at ninety-one and ninety-two, two at ninety-three, and one death each at ninety-four and ninety-nine.

During the year, 275 died who had served in the Civil War, and of those ninety had followed the Lost Cause; eighty-three were medical officers of United States volunteers, two were medical cadets, ten served in the hospital corps, and two had been army nurses. There were two veterans of the Mexican War, two had served in campaigns against the Indians, seventeen had been in the Spanish-American war, and seven had been medical officers in foreign wars. The army lost nine officers, one of whom was surgeon general; three members of the Medical Reserve Corps, and eight contract or acting assistant surgeons. The navy lost twelve medical officers, the public health service ten officers, and the organized militia twenty-eight medical officers, of whom nine had attained the grade of surgeon general.

Medical colleges lost fourteen professors, lecturers, instructors and demonstrators; hospitals lost 290 members of staffs; municipalities, townships and counties, 165 health officers, and school boards or boards of education, fifty-seven members. There were twenty-nine deaths of members of State boards of health, medical examination and registration and charities; twenty-nine coroners and medical examiners, and eighty-four of railway surgeons.

Of those who died, one had been a member of Congress, one an ambassador, seven members of State senates, thirty-nine members of the House of Representatives, thirty-nine had been mayors, twenty-five aldermen, thirty-nine had

served in various civil positions, fourteen had been postmasters, twenty editors of medical or lay journals, eleven had been clergymen, of whom two were foreign missionaries and six had been attorneys.—Cin. Lancet-Clinic.

CARBOLIC ACID, A DEADLY POISON:—Deep sea bathing is robbed of its terrors if a life-preserver is worn, or if a life-boat be at hand. Otherwise it is shunned.

If carbolic acid is placed in the column of deadly poisons for which there is no known antidote, where it belongs, the public will have fewer accidents, and the profession be saved much disappointment and chagrin. The popular use of carbolic acid as a harmless disinfectant together with the erroneous impression among doctors that we have an antidote for it, has resulted in many unpleasant experiences. The hard facts are, that it is a deadly poison and there is no known antidote. Let us so regard the situation and proclaim it.

We have felt ourselves secure in the use of alcohol or the soluble sulphates, but laboratory experiments with living organisms have demonstrated these agents to be of very limited use and not to be regarded as antidotes.

Toxicologically carbolic acid is both an irritant and a neurotic poison. It damages the tissue by virtue of contact as an escharotic; it is rapidly absorbed and destroys life through the nervous system—paralysis and coma. It stands midway between irritants and neurotics, it properly belongs to both classes. Any substance therefore to be of utility in dealing with such cases must fill the double role of a chemical antidote to neutralize that which remains in the stomach, as well as a physiologic antidote to render inert that which has been absorbed. There is to-day no such agent known. We must then place carbolic acid in the list with aconite, hydrocyanic acid, oxalic acid, poisons for which there is no accredited method of procedure, compounds which kill quickly, so that what is done must be done very promptly after ingestion.

The one aim is to wash off, wash out, dilute, evacuate, prevent further absorption. In case of internal administration the very prompt use of the stomach tube to wash out the poison. The soluble sulphates have some value in that they form with carbolic acid, sulphocarbolates, thereby preventing further escharotic action. But this cannot be depended upon when distinct quantities, an ounce or more, are taken with suicidal intent. Alcohol has the advantage of preventing the coagulation of tissue and even restoring the integrity of the mucus surface if applied at once, but cannot prevent absorption, nor can it be regarded in any sense a real antidote; to be of any value it must be used within a very few minutes after contact. Macht of Baltimore has opened our eyes to the real facts in the case. May we govern ourselves accordingly.—J. M. B. in Med. Herald.

GASTRIC APHORISMS: If finely ground white flour could be stricken from our dietary, many intestinal and malnutritional diseases would disappear. Its nutritional value is low, it is seldom well masticated, it creates a fecal mass which packs in the ascending colon unless peristalsis is very good, it causes constipation. The drawbacks to such flour dwells in the separation of all bran and mineral matter, and the fine state of sub-division.

Uncooked starch is a food of value in combatting putrefactive bacteria in the colon. Eat oatmeal as the Scotch do. Pour hot water over a generous dish of it, let it stand one minute, drain off the water and eat with cream and sugar. The longer oatmeal is cooked the more constipating it becomes.

Chronic colitis, characterized by much mucous and blood with frequent stools is practically never cured. The mucous membrane never becomes normal. If the lesion is ultimately overcome, the mucous membrane is left with patches of scar tissue, atrophy of glands and numerous contracted areas which means pronounced constipation.

The most soothing application for colonic douching or irrigation is ichthyol, used with warm water. It may be retained indefinitely without harm. If there is a toxic dose I have never met it. I have used it frequently an ounce to the quart.

The frequency of gall bladder disturbance following typhoid, pregnancy and intestinal stasis points to the colon as a most common source of infection. Colon irrigation with antiseptics, and antitoxic diet, use of hot water before and after meals with a salicylate, and abdominal massage, has overcome the trouble in many cases where surgical interference has been rejected.

Toxic foods, those which undergo decomposition quickly unless digested promptly, and whose decomposition products are particularly toxic, like meat, eggs and fish, should be used sparingly, or not at all by those who suffer with constipation or faulty elimination. A diet rich in coarse vegetables and fruit does well in such cases. A shortage of caloric value may be made up by adding cream and butter.

For latent constipation no measures have yet been devised that give better results than coarse food and physical exercise; both in abundance.—J. M. Bell, M.D., of St. Joseph, Mo., in Medical Herald.

OLD AGE:—Do we as doctors take the same interest in people who are beginning to approach old age as we ought to? There are a few reasons why we "hang back" but more why we, as family doctors, should press forward.

In the first place we are rather shy about obtruding ourselves on people who do not ask for advice. Again, we do not wish to alarm our friends by suggesting that they undergo a physical examination; and finally, if we find something of a chronic nature present we may be somewhat perturbed as to the best manner of overcoming the defect.

Some life insurance companies have already taught us the importance of a careful examination from time to time of

policy holders. But, aside from that, we as conservers of the individual and public health of the people should go more thoroughly into the mode of living, the method of work, and the usual manner of the life of all of our patients past 40 years of age.

What, then, constitutes "old age"? Surely it is not the actual years that a person has lived on this earth, but it is rather his aptitude and capacity, both physical and mental, for performing his usual work. Without going into an extensive discussion of the various symptoms, we may say that loss of memory for recent events, disinclination for physical work and a perverted or rather an increasing appetite, are the leading signs. Some men and women show this at 40 years of age while others are pointed out with pride who preserve their "faculties" till seventy or over. It behooves every person past 50 years of age to go to his physician once each year, as he does a dentist if he has any teeth left, and undergo a careful examination. First, as to his kidneys, regarding the quantity of urine passed in 24 hours, the presence of albumin or sugar or other abnormalities. Then the digestive system, as to the quantity and character of food taken. We need less meat and more starchy food as we grow older—and finally a skin examination for cutaneous cancers and other conditions. It has been my custom for a long time to reason with all persons who show symptoms of advancing age to submit once each year to a thorough physical examination. By this means incipient diseases have been discovered and in many instances corrected.—M. D. Hoge, M.D., in Va. Med. Semi-Monthlu.

PERSPIRATION OF THE FEET:—Wash the feet with a 5 per cent. solution of potassium permanganate every night, or paint them with a 5 per cent. solution of salicylic acid in alcohol. Formaldehyde is effective, but burns too much and hardens the skin, making it liable to crack.—Critic and Guide.

AVERAGE SKILL:—In medical jurisprudence there is a well known axiom that the skill required of a medical practitioner shall be equal to the average skill of the medical men who practice in his locality. The limiting word locality apparently being used in order to determine the standard of comparison for the matter in hand for each separate in-However, speaking broadly, the average skill of medical practitioners remains the same over the entire coun-In our personal experience as a consultant we have observed no difference in the quality of the work done in city as compared to that done in the country. One is as good as the other, and both are uniformly good. man has his limitations, but the nature or extent of these is not indicated by his location. Assuming, therefore, that the average skill of medical practitioners throughout the country is on a certain plane, any diagnostic procedure or therapeutic agent which is above or below this plane will be used by but comparatively few men and its field of application is self limited. The average man is not interested in it and oblivion is its portion. For example, we have the Wright opsonic idex, a scientific theory and exact technic. which fell down because so few men could follow the rules, and when they did the value of the information did not equal the value of labor involved. On the other hand we have the X-Ray, a marvelous force with many alleged fields of usefulness, but which has come to stay because the average man can use it to his advantage in his fracture cases. Each year many interesting and apparently scientific discoveries are presented to the profession for its approval, but few of them live past the second summer. The average practitioner can not use them in his work and that is the end of them. The acid test of usefulness at once reveals the dross. How rare indeed is the pure gold. We take one hundred steps forward and slip back ninety-nine of them.

We sometimes marvel at the willingness of the average practitioner to keep trying the output of the vagaries of the self-acclaimed scientist, upon his best friends, i. e., patients. Doubtless the practice of medicine is making progress, but it is more to be compared to that of a tortoise than to that of a hare.—Cal. Eclectic Med. Jour.

THE GERMICIDAL EFFECT OF LACTIC ACID IN MILK:—The Journal of Infectious Diseases for May, 1915, contains an article by Heineman in which he reaches these conclusions:

Some acid-tolerant cells of bacillus coli may survive the presence of 0.6 per cent lactic acid in milk.

B. dysenteriæ, B. typhosus, B. diphtheriæ, B. paratyphosus B, and Spirillum choleræ in these experiments were destroyed by the presence of 0.45 per cent lactic acid. It is possible that strains of these bacteria exist which are able to resist a greater amount of the lactic acid.

Acid-tolerant strains of B. coli, B. dysenteriæ, B. typhosus, and B. paratyphosus B may multiply in the presence of quantities of lactic acid which are destructive to the majority of cells. The smaller the initial amount of lactic acid, the more likely is the growth of acid-tolerant strains. Consequently, the slower milk sours, the greater is the danger of pathogenic bacteria surviving.

The growth of the test bacteria is influenced to a marked degree by the amount of acid present. Up to a fairly definite amount of acid there is an increase in the numbers, followed by a decrease, which becomes more pronounced as the amount of acid increases. The amount of acid may increase after the number of bacteria has commenced to decrease owing to the liberation of enzymes.

Acids other than lactic acid are frequently present in buttermilk. Buttermilk, therefore, should be looked upon with suspicion, especially if heavily polluted, unless prepared from pasteurized milk. Still the chances of buttermilk becoming a carrier of infection are much smaller than of raw sweet milk.

The presence of saprophytic bacteria in buttermilk may

have some influence on pathogenic bacteria. Whether this influence is favorable or otherwise is difficult to determine by present bacteriological methods.

FALLING HAR:—As to the falling of the hair, a strong solution or infusion of capsicum applied to the scalp every other day until the hair quits falling will relieve this trouble. The solution should be strong enough to cause a burning sensation of the scalp whenever applied. I have used this for falling hair and have never known it to fail.—I. B. Hammer in the Medical World.

FEE SPLITTING IS "CRIMINAL DISHONESTY":—The secret divison of fees between physicians and surgeons is "criminal dishonesty," said Dr. William D. Haggard of Nashville, who addressed the Fellows of the American College of Surgeons, at the San Francisco meeting.

"Fee-splitting," Dr. Haggard declared "is criminal, because it leads, first, to unnecessary operations; second, to incompetent work resulting in unnecessary death; and, third, to a constant lowering of the moral and professional standards in medicine. The practice has all through it the element of theft.

"When a physician refers a patient to a surgeon under an agreement that the surgeon later is to divide with him the fee collected, the crime is not primarily one against the pocketbook of the patient. It is a crime against the health or life of the patient. This practice means that the physician auctions off his patient to the highest bidder, who naturally is the most incompetent and unscrupulous surgeon available.

"Another evil is that the surgeon feels under obligation to accept the diagnosis of the physician to operate, whether or not on examination he agrees with the diagnosis of the physician. If he does not operate in such cases he discredits the ability of the physician and loses further business with him. Thus is perpetrated the meanest of crimes, an unnecessary surgical operation.

"The sovereign remedy for commission-giving by physicians is publicity. If we don't cure the evil by extermination the public will do it by legislation and the elimination of the unfit. The physician who diagnoses a case is quite as much entitled to compensation as is the surgeon, but separate bills should be rendered by the physician and the surgeon to the patient. In other words, the patient should always know what he is paying for. To stamp this practice out of the profession of medicine is one of the chief tasks of the American College of Surgeons."—Pacific Medical Journal.

RELIEF IN NERVE PALSIES:—After many years of despondency and darkness it would seem that many of the intractable cases of chronic invalidism in children are giving way before scientific progress in therapy.

For many years orthopedic surgeons have labored with chronic bone conditions and the results, often brilliant, have come to be the expected thing in this branch of pediatric therapy.

Lagging behind, but yet as full of interest, have been the muscular and bony deformities resulting from nerve tissue lesions. The many little patients with Erb's palsy, with facial palsy following otitis and anterior poliomyelitis, have been doomed to live with fragmentary and unhappy lives.

It is a signal of great promise that within the recent decade neurologists and surgeons have been working together to obviate these particularly chronic defects; and further, their efforts are commencing to be crowned with success.

Ballance and Stewart, Faure and Foret. Spiller and Frazier, Kennedy, Cushing, Clark and Taylor and others have now reported cases of obstinate and long-standing nerve palsies in which the patients have been cured by nerve anastomosis.

Kennedy first reported a successful cure of nerve anastomosis for a spasmodic tic. Frazier cured a case of facial palsy by grafting the distal stump of the facial nerve on the healthy stump of the spinal accessory, and more recently Clark and Taylor have done the same thing with the hypoglossal. In Erb's palsy promising results are looked for, and more recently Spiller has had some very encouraging results in anterior poliomyelitis.

We feel persuaded that in nerve anastomosis a fruitful field of therapeutics has been opened up and that it only needs refinement in technique to literally make the dead limbs walk.—*Pediatrics*.

GREAT MEN ARE BIOLOGICAL SURPRISES:—Survival of the fittest is nature's plan of raising healthy plants, animals and children. Our higher sense of responsibility and scientific efficiency directs us to take proper care of unpromising infants. We cannot adopt the Greek plan of throwing undesirables away. The Spartan infant—if a male, was exposed to public view, and if found deformed or weakly, was put to death. Some of the most efficient individuals have been born in ill health and with bad bodies.

Emmanuel Kant, the great philosopher and teacher of modern intellect, was so delicate as a boy that his life was despaired of.

Herbert Spencer was so feeble that he was not given a regular education, but no Englishman had a more marked influence upon his generation.

Pope had Pott's disease of the spine and could not stand erect without his leather jacket.

Sir Isaac Newton, the philosopher who saw the apple drop, was in his childhood so small and frail that he was thought not worth while keeping alive.

Genius means hard work, close observation, patient application and indefatigable perseverance. Eugenics could never prognosticate a Martin Luther, a Napoleon nor an

Abraham Lincoln. What eugenics could produce a Beethoven, a Mozart or a Wagner? What combination of Adonis and Venus will give us a Shakespeare, a Goethe, a Michael Angelo, a Raphaello, a Luther Burbank or an Edison? These are "Sports" or biologic surprises.—Pacific Med. Jour.

METHOD OF DESTROYING LICE AND BODY VERMIN:-For practical purposes, Kinloch, British Med. Journal, states. the destruction of lice and nits is best secured by immersion of verminous garments and bedclothes in a petrol or benzene bath. Danger from fire and waste of petrol are avoided by using such a bath and extractor as are employed in a dry-cleaning apparatus. In such an apparatus 90 per cent of the petrol or benzene is recovered for future use. A petrol or benzene bath is necessary, especially for uniforms and woollen garments generally. In cases in which the clothing is such that it is not injured by immersion in water, steeping the garments for half an hour at 12 C. (54 F.) in a soap solution containing 2 per cent of trichlorethylen or 10 per cent of tetrachlorethan secures destruction of lice and nits. For cleansing the body itself, bathing or sponging with soap solutions containing 2 per cent of trichlorethylen or 10 per cent tetrachlorethan gives the best results.

QUININE AFTER OPERATION:—A. Bonnot, St. Louis, gives his experience with the use of rectal injections of muriate of quinin after operative procedure. He first noticed the good January 9, 1915, gives his experience with the use of rectal injections of muriate of quinin after operative procedure. He first noticed the good effects in a case of appendicitis in which he had instructed the nurse to give the patient ten grains of quinin muriate every six hours until the patient was able to take it by the mouth. The nausea and vomiting, gas pains, backache and postoperative thirst were lacking in the patient and he has since used it

in later laparotomies with strikingly good results. In all cases, the postoperative thirst was much retarded, gas pains were lacking in nineteen cases out of twenty, and in none was there the usual backache. In only four cases was nausea and vomiting pronounced, in ten there was none, and in six it was only slight. Doctor Willis Young, of St. Louis, has also used this method with similar results.—Journal A. M. A.

FOOD AND GASTRIC ULCER:—The observation of relief of gastric distress by food ingestion is of prime importance in diagnosis of uncomplicated peptic ulcer. If its history is constantly obtained, it is practically pathognomonic in three out of five cases. While patients, on casual questioning, frequently state that food distresses them, yet careful inquiry will elicit the fact that food does not at once cause discomfort, but that such comes on from one to four hours following ingestion. If the gastric lumen is not obstructed (hour-glass contraction) or if the pyloric channel remains patent, our observation is that the duration of food relief of pain bears direct proportion to the size and character of the meal taken. Small amounts of food give relief for a shorter period than do large, and liquid food relief is not infrequently more prompt than that obtained by solids. The dread of pain following food intake often leads to an anticipatory attitude on the part of the patient.—FRANK SMITHIES, in Interstate Medical Journal.

MAGNESIUM SULPHATE IN ACUTE RHEUMATISM:—Thiroloix and Mairesse extol the value of intra-muscular injections of a 25 per cent. aqueous solution of magnesium sulphate in doses of 4 cubic centimeters daily. This method of treatment not only relieves the pain but also lessens the fever and shortens the course of the rheumatic attack. The magnesium sulphate may be given alone or in conjunction with sodium salicylate. Generally four injections suffice to effect a cure.—Bulletin General de Therapeutique.

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## Griginal Communications.

# CLINICAL LECTURE AT THE WOMAN'S HOSPITAL OF THE STATE OF TENNESSEE

BY M. C. M'GANNON, M.D., F.A.C.S.,

Professor of Surgery at Vanderbilt Hospital and Surgeon at the Woman's Hospital of the State of Tennessee.

CASE L ECTOPIC GESTATION.

The patient whom we have here under observation has been brought in a distance of fifty miles by train and gives the following history: She is twenty-four years old, has always enjoyed good health. During her childhood she has had measles, whooping-cough and scarlet fever, from each of which she recovered promptly and with no complications. At seventeen years of age she was in bed for five weeks with typhoid fever; her recovery was uneventful and her health from that time has been perfect.

Menstrual Life: She began to menstruate at fourteen years of age. It has always been regular, the flow continuing four and five days, normal in quantity and without clots

or pain. She complains of some leucorrheal discharge. Her last menstruation appeared two weeks ago. It continued four days and was normal in quantity. The period preceding this occurred one month before, at the right time and also continued four days and was normal in quantity.

Present Symptoms: Twenty-four hours ago this patient had a sudedn attack of pain. The suffering was severe and was referred to the center of the abdomen. This was accompanied by nausea and vomiting and she states that during the night she vomited four times. The pain was soon referred to the lower part of the abdomen with the greatest severity on the right side. The doctor, who was called to attend her, stated that there was a marked tenderness in the right lower quadrant of the abdomen, and that pressure on the left side from the colon caused the patient to complain of pain on the right side. This attack of pain was accompanied by increased pulse rate, but there was no elevation of temperature and no shock. A diagnosis of appendicitis was made and the patient was advised to come to the Woman's Hospital. This she decided to do and so she was at once brought here.

Upon her arrival at the hospital an examination demonstrated the fact that the temperature was normal, the pulse rate 110 and the urine negative. The examination of the blood showed a hemaglobin percentage of seventy and a leukocyte count of seven thousand. There was no distention of the abdomen, but the abdominal walls were tense and did not expand on deep inspiration. There was marked tenderness over the whole of the lower abdomen with maximum intensity on the right side. This is the condition which we now find to be present.

We will now examine the pelvic structures through the vagina. This is a procedure which should be employed in every case in which a woman comes with a history of this kind, and it should be especially observed where the pain is referred all over the hypogastric region.

In this case we find a mass to be distinctly felt on the right side of the uterus. It is somewhat doughy to the touch, and the patient complains of tenderness upon the attempt to make a satisfactory bimanual examination.

Now comes the question of diagnosis. With what have we to deal? Is this a case of appendicitis? The suddenness of the onset, the marked pain referred to the center of the belly, accompanied by nausea and vomiting, and especially when we get, as we do in this case, a history of several attacks somewhat similar which have occurred in the last two or three years, makes the diagnosis of appendicitis, to say the least of it, very likely to be the correct one. But when we consider the fact that the temperature is normal, that there is no leukocytosis (the white blood count being only seven thousand), that the pain is all across the lower abdomen, and that there is a mass to be distinctly felt in the right pelvic region, the question of the diagnosis of appendicitis is practically eliminated. The question arises. "With what have we to deal?" Is this a case of salpingitis? The inflammation of the Fallopian tubes undoubtedly might produce the pain which the patient has complained of. It might be responsible for the pain elicited across the lower part of the abdomen. It could be the main factor in the production of the rigidity of the abdominal walls and might be the cause of the mass that is to be felt in the pelvic region. However, the acuteness of the onset is not indicative of an inflammatory process in this The leukocytosis, too, tends to put to one side the thought of an inflammatory process, so that we may safely conclude that this patient is not suffering with an acute salpingitis.

The next diseased condition that comes to one's mind is the possibility that this patient's suffering is due to an ectopic gastation.

The classical symptoms of this disease are, an interference with the menstruation, either a complete suppression,

that is, a period is missed altogether, or a flow sometimes only amounting to a stain and then in two or three weeks a more or less sudden pain referred to one or the other inguinal regions, accompanied by nausea and vomiting.

Upon examination of such a case we will ascertain that there is some rigidity of the abdominal muscles across the lower abdomen, tenderness upon pressure and the vaginal examination of the pelvic contents will demonstrate a mass more or less firm and pyriform in shape, lying to one or the other side of the uterus, provided, however, that rupture has not taken place. If, however, the rupture has taken place, then the pelvis will be filled with a more or less doughy mass which will represent a quantity of blood which has clotted in this region. The blood picture, in such a case, will depend somewhat upon the amount of blood that has escaped. If the amount be large, there will be a reduced hemaglobin per cent, while the leukocyte count will be practically, normal.

Now let us apply these classical symptoms to the case under observation. This patient gave a history of normal menstruation. That is quite different from the classical sign of an inteference with the menstrual flow, but there are many exceptions to this classical sign. We have had a number of cases in the hospital in which there was no interference with the menstrual flow and yet upon operation, extra-uterine pregnancy was found. So that to be menstruating normally is no proof that she is not suffering with an extra-uterine gestation.

This patient had a sudden onset of pain, more or less central in the abdomen. This is the usual symptom in extrauterine pregnancy where rupture, either partial or complete, occurs.

Nausea and vomiting were symptoms in this case. Nausea and vomiting are symptoms of any condition inside the peritoneal cavity in which the peritoneum is put upon the stretch or injured. This patient, soon after her attack of pain, had a rapid pulse, and upon examination it was found that her hemaglobin per cent was seventy. This is just the condition we would expect to find where a rupture of a blood vessel and a hidden hemorrhage had taken place. This reduced hemaglobin per cent is an essential anemia due to the loss of blood, and her increased pulse rate is just what we might expect to find in such a condition. Upon examination the tenderness over the lower abdomen, with the tension of the muscles of the abdominal walls, are both conditions to be expected when the peritoneum is irritated by a foreign body or by any inflammatory process.

Then the mass that is felt in the pelvis, doughy in type, is just what we would expect where there has been an escape of blood with clotting of the mass in the pelvic region. The picture, while not classical and by no means perfect, is quite sufficient to warrant the diagnosis of extra-uterine pregnancy with rupture. So this patient will be prepared for operation and immediately subjected to an abdominal section.

There are many causes of gestation occurring in the Fallopian tubes. These causes may be congenital or acquired. Usually, however, they are acquired. They may be external to the tube or internal to that structure. They are more commonly internal. Of the external causes bands of adhesions, narrowing the channel of the Fallopian tube or twisting the tube out of shape may be mentioned. The most common cause is infection of the mucous membrane lining the tube. This infection follows either an abortion or a delivery, or what is more commonly the case, is due to gonorrheal contagion.

In the early stages of this inflammatory process the mucous membrane is not capable of lodging the fecundated ovum. The cells that line the Fallopian tube are columnar in type and ciliated with its wave-like motion toward the

uterine body. If the mucous membrane be not too badly injured, the ovum may find a favorable lodging place within the tube where it may continue to develop. if the mucous membrane be inflamed, this wave motion is lost so that it is impossible for the ovum to be carried on into the uterus or for the spermatozoid to pass through the Fallopian tube and reach the This being true we can readily understand why it is that women who have suffered from some infection at the time of delivery do not soon again become pregnant. As a matter of fact, a pregnancy subsequent to a salpingitis is proof that the inflammatory process in the tube has ceased, and that the mucous membrane has again become normal. If, however, the mucous membrane is only partially recovered we can readily understand how a fecundated ovum fails to be carried on into the uterus but finds a lodging place on the healthy mucous membrane of the tube, and there goes on to development and produces an ectopic gestation.

It will depend altogether upon the extent to which this tube has recovered from its former diseased condition as to how long this fecundated ovum will remain growing in this abnormal situation. The great majority of these cases are speedily destroyed for the lack of nutrition and never present any symptoms. Those, however, that find a lodging place in a fairly healthy tube get a sufficient amount of nutritive material from the mucous membrane so that development may take place.

The life history of such a fecundated ovum again depends, to a large extent, on the portion of the tube which has become healthy, because it will be in that recovered portion that the ectopic gestation will take place. If the ovum becomes fixed at the outer extremity of the tube it will end by aborting in the peritoneal cavity, whereas, if it is in the uterine end the abortion may take place into the uterine

cavity, while if the healthy portion of the tube to which this fecundated ovum attaches itself is in the center, the rupture will in all probability take place in one of two directions, either downwards into the broad ligament or upwards through the Fallopian tube into the peritoneal cavity. If the rupture is downward into the broad ligament the danger is very much less from a severe hemorrhage than if the rupture takes place into the free peritoneal cavity. These latter cases are the ones that sometmes prove rapidly fatal.

Treatment: Many lines of treatment have been advised and adopted for this serious condtion. It is probable that a great majority of the cases in which a slight hemorrhage occurs, this bleeding producing the death of the ovum, which then disintegrates and disappears without the condition having been recognized. In those in which the diagnosis has been made before the rupture, it has been advised to pass strong currents of electricity through the mass, or to inject the mass with alcohol, hot water or some other fluid in order to cause the death of the foetus, and bring about disintegration and absorption of the foetal products. But this blind method of treatment is usually attended by want of success and is always accompanied by more or less danger. If the diagnosis be made early, there is only one line of treatment and that line is without question. is, to do an abdominal section and remove the tube with its contained foetal products. If, however, a rupture has occurred and we have reason to believe that disintegration and absorption of the foetal products may take place, it is possible to advance arguments in favor of non-interference with the condition. But since this diseased structure is hidden away inside the abdominal cavity, and so placed that it is impossible to know the exact condition and the attendant dangers of non-interference, the wise physician counsels an early operative procedure so that the life of his patient may be safe-guarded.

In this case that we have before us to-day, the diagnosis of extra-uterine pregnancy having been made, and being assured that a rupture of a greater or lesser extent has occurred, within a short time, as shown by the reduced hemaglobin per centage, the rapid pulse and the history of a recent pain, it is clearly indicated to open this abdomen and deal with the diseased condition that we find therein.

We shall make a long incision between the umbilicus and pubic bone, and just a little to the right of the mid line; thus passing through the rectus muscles, the fibers of which we shall separate. This incision when closed will leave a much stronger wall than if we make the incision directly through the center line. We have separated the structures down to the peritoneum, and we see that underlying this thin tissue is a dark substance which we know is blood in the peritoneal cavity. We have now opened the peritoneum and at once you see flowing from the opening free, bright blood, which demonstrates the fact that the hemorrhage is still going on from the open vessel which we will find no doubt in the Fallopian tube.

I am withdrawing the mass which was felt lying on the right side of the uterus. It comes up with some difficulty because of adhesions in the pelvic region. Now that it is withdrawn from the peritoneal cavity it is readily seen that the tube is greatly distended and already ruptured on its free peritoneal surface. We find that a small vessel is bleeding which accounts for the free blood in the cavity. We find here also a great many clots which more or less fill the pelvis. The uterus is not much enlarged. proximate end of the tube seems to be fairly healthy for at least one-half inch from its junction with the uterus. Consequently we will save this part of the tube by cutting through it in an olique direction, and then by suturing the peritoneal covering to its mucous lining. This procedure will insure the patency of the canal and enable an ovum to

pass on into the uterus at some future time. The tube and mass we will now cut away and then secure the bleeding vessels of the broad ligament. These are now tied off with catgut, and then all of the raw surfaces peritonized. The blood clots we will now remove from the cavity and proceed to close the wall in layers. Each layer being united separately with an iodized suture.

This is a procedure that I have been adopting for many years and I find no reason to make any change. The only dressing that we will apply is a layer of sterilized gauze saturated in alcohol. This dressing we shall not expect to remove until the patient is ready to get out of bed at the end of eighteen or twenty days. The recovery should be uneventful.

#### CASE II. A FRACTURED FOREARM.

This patient, upon whom we are about to operate, was brought to the hospital with the history of having fallen from a pony two weeks ago which resulted in the fracture of his forearm.

His family physician saw him immediately afterwards and succeed in reducing the fracture so that the arm bones were quite straight and he applied splints to hold it in that position. The little fellow suffered practically none at all following the reduction of the fracture, and two days later the doctor, to be sure that the limb was in perfect condition, took off the splints and examined it again. He found it in good condition and so replaced the splints.

The little fellow was up and about and at the end of two weeks the splints having become displaced, the mother examined the arm and reported that it seemed to be crooked. This condition was verified by the physician and so he was brought to the hospital for further examination and for such treatment as might be necessary to correct the deformity.



Fig. 1. From X-Ray by Dr. Geo. C. Williamson, showing fracture two weeks after injury, ends of radial fragment attached to ulna by callus.

An X-ray examination demonstrated the fact that the boy had suffered a transverse fracture of the radius about its center and that there was a green stick fracture of the ulna at the same point. The plate which demonstrated this condition I am now exhibiting to you. The condition is very clear with this illumination, but not so clear by any means without the X-ray picture.

Now comes the question, "What are we to do for this child?"

If the bones are allowed to remain in their present position rotation of the radius about the ulna will be practically impossible. Can we reduce this fracture without a cutting procedure? This, I believe, cannot be done for the reason that the amount of callus that will have formed in the two weeks that has elapsed since the accident will be sufficient to prevent the approximation of the ends of the bones. If we are unable to do this, then we must expose by an incision the fractured bone, separate the callus from the ends, and then bring these ends in proper position, after which we must adopt some procedure to retain them in that position.

There are three methods, any of which we may employ for the purpose after the ends of the bones have been brought together. We may either suture together the periosteum covering the fragments of the bone, or we may drill a hole through each fragment and unite them with a silver wire passed directly through each portion of the bone; or we may apply a steel plate, to bridge over the hiatus and fasten this plate to the two ends of the bone by means of screws.

Having put the boy under the anaesthetic, we will now attempt a manual reduction of the fracture. You will see that we are able to make the arm fairly straight so that it would seem as though we have really approximated the ends of the broken bone. In order to prove whether we have or not, we will examine it with a fluoroscope. As the X-ray pictures the limb, we see at once that a reduction has not really occurred. The bones still ride each other as shown in the picture, so we will at once proceed to the open method of treating this fracture.

A three-inch incision over the outer portion of the bone will readily let us down upon it without involving any important structures. The bone is readily exposed and we see the callus that binds the broken portions together. By manipulating the arm you see that we can readily turn out the broken bone. The two extremities are exposed and we

will now even them by cutting off with the bone shears the ragged ends. This allows the upper fragment and the lower fragment to drop together comfortably. The friable condition of the periosteum, due to the exduate that has been thrown out, makes it impossible to secure apposition of the ends of the bones by means of suturing, so we may resort either to plating or uniting the ends of the bone with silver wire. The little chap being only seven years of age, necessarily has small bones, hence the ordinary sized plate would be cumbersome to apply in this instance.



Fig. 2. From X-Ray by Dr. Geo. C. Williamson, ends of radial fragments secured by wire.

The silver wire, in my opinion, will serve our purpose very much better than a metal plate. So we will now proceed to drill a hole through the end of each bone. This, as you see, is easily accomplished and we are able to pass this No. 26 silver wire through the holes that we have made, and by twisting the ends of the wire together we bring the bones in close apposition. It is now necessary to approximate the soft parts which we will do with No. 0 iodized catgut, after which the skin can be closed with the same material.

The great advantage of the open method of treating fractures is, that we are not bothered either with tying the small blood vessels in an operation of this kind or with approximating the deep soft parts. We merely unite the skin opening, believing that nature will take care of any small amount of blood that may escape.

We will support this arm on an internal angular splint that will fix both the wrist and elbow joints. The union should be complete so that the splints may be removed at the end of three weeks.

Success in a case of this kind depends upon not only accurate diagnosis, made by the use of the X-ray examination, but also upon absolute surgical cleanliness. Any infection of the wound is likely to be followed by failure of the operation.

You will have observed while I was doing this operation that I was extremely careful to touch no part of the wound with my hands, even though covered with rubber gloves. We use only boiled instruments, and even these we carefully protect by not handling the parts that are applied to the open surfaces.

This little fellow will not be kept in bed, but will be allowed to run around the hospital for a few days at the end of which time, if no untoward symptoms arise, he will be sent home to be under the care of his family physician.

#### PREVENTION OF BLINDNESS.

We live in a day and in a land of waste. The prevention of disease is a matter of knowledge. Knowledge is one of the most valuable assets of mankind, and yet we are to-day, notwithstanding all our boasted erudition and high degree of civilization, so little removed from the customs, measures and methods of our savage and unenlightened forbears that it is necessary to have legislative enactments to compel our people to accept the beneficent advantages of known and established facts of well defined and demonstrable knowledge, just as it was at one time necessary by law to forbid cannabalism, and even the eating of human bodies that had died of the plague.

The loss of the most wonderful and marvelous faculty of vision is a calamity terrible to the individual as well of grave moment to the community, greatly to be deplored, and notwithstanding the beneficent results secured by our Schools for the Blind in alleviating to some extent this so pitiable, grievous and well nigh irreparable affliction, we can and do, most earnestly and sincerely commend the work of the "National Committee for the Prevention of Blindness" in their grand and noble work in limiting to some extent this individual, local, municipal, State and National waste.

In a recent issue of this journal we reproduced "Publication No. 5," issued by this important Committee, and sincerely hope that it was of interest to our readers and that it may be of benefit to some of those under their care. The following excerpts from the Committee's "News Letter" No. 3, we deem well worthy of careful reading and consideration, dealing with such important etiological factors in the production of blindness as Ophthalmia Neonatorum, Trachoma, Wood (methyl) alcohol, etc., as well as showing what is being done and what has been accomplished in eighteen States and Canada. (Ed. S. P.)

While ophthalmia neonatorum (babies' sore eyes) continues to send to the schools for the blind a large percentage of unfortunate children (nearly 100 in the school year 1914-15) a gratifying reduction is shown by comparing the reported percentages for the five years since 1910. Of the new pupils entering in each of the following years the percent blind from babies' sore eyes is:

1910-11	23.9%
1911-12	21.2%
1912-13	22.7%
1913-14	19.6%
1914-15	15.1%

More care in making reports and greater accuracy in diagnoses are probably responsible for some of the reduction indicated, but it is believed that the agitation which has been conducted by the various Committees, Commissions and Societies for Prevention of Blindness is beginning to bear fruit.

The Journal of the American Medical Association has opened a campaign to secure the prohibition of the manufacture of methyl alcohol, commonly known as "wood alcohol." The extreme danger attending the use of methyl alcohol, even when confined to external application, and particularly the danger of confusing the poisonous wood alcohol with grain alcohol is the animus inspiring the Journal's editorial campaign, in which, as the mouthpiece of the American Medical Association, it must have the backing and co-operation of the members of the association. Recently three persons died and two others were made completely blind from drinking a cordial made partly of wood alcohol, says the Journal of the American Medical Association.

Alabama:—A survey of the trachoma situation in Tuscaloosa was made sometime ago by Dr. Herring of the United States Government and steps were immediately taken to remedy the condition in public schools. The spread of the disease has been checked and no further danger is now felt. No cases were found among the students of the University.

Arkansas:—The State School for the Blind during the summer sent out thousands of circulars on "Preventable Blindness."

Trachoma is the principle source of blindness in the Arkansas School for the Blind. Naturally, in the campaign for the prevention of blindness in that state which is under the direction of Supt. John H. Hinemon of that school, the first stroke is against trachoma. An eight-page leaflet, written by Dr. John G. Watkins, oculist and aurist to the school, describing the disease and giving general directions for

prophylaxis and treatment, has been issued and is being widely distributed.

Little Rock physicians and health authorities strongly endorse the passage of an ordinance by the City Council of Kansas City, Missouri, requiring physicians, nurses or midwives assisting in the birth of children in the city to place in the eyes of the baby two or three drops of 1% solution of nitrate of silver or a 25% solution of argyrol.

California:—During the meetings of the Public Health Nursing Association and similar organizations held in San Francisco last June, a largely attended meeting of persons interested in public health questions in San Francisco was held at the civic center. The subject of prevention of blindness was discussed by the Secretary of the National Committee and elicited much interest.

The Ophthalmia Neonatorum Bill introduced by Senator Jones in the California legislature was passed and became a law by the signature of the Governor early in June, 1915, The act provides for the definition of ophthalmia neonatorum, its reporting within twenty-four hours of its occurrence, and certain measures of prevention to be taken by the local health officer and the State Board of Health. The interests of this bill were in the hands of Dr. Glaser of the State Board of Health.

California passed a new Registration-of-Vital-Statistics law during the last summer, putting this under the State Board of Health. The question is to be inserted on the birth certificate: "Was a prophylactic for ophthalmia neonatorum used? If so, what?"

At a meeting in Berkeley last June of the American Association of Instructors of the Blind one afternoon's session was given to the discussion of prevention of blindness.

For the use of the California Committee on Prevention of Blindness a set of fifteen photographic reproductions of the National Committee for the Prevention of Blindness exhibits on Babies' Sore Eyes, Midwives, and Wood Alcohol Blindness, were purchased by Mrs. Andrew S. Rowan. A similar purchase was made by the Pittsburgh Association for the Blind.

Illinois:—On June 25, 1915, Governor Dunne of Illinois signed the bill which was passed by the legislature of that state for the prevention of blindness from birth infection or ophthalmia neonatorum. Its chief provisions are:

- (a) That any diseased condition of the eye of any infant in which there is inflammation redness, swelling, or any unnatural discharge at any time within two weeks after birth, shall be legally regarded as ophthalmia neonatorum.
- (b) That any physician, midwife, nurse, parent, or any other person assisting any woman in childbirth or assisting in the care of any infant shall be required to report such case of ophthalmia neonatorum coming to his or her attention, to the health authorities within six hours after noting same.
- (c) That physicians, midwives, etc., are required to inform parents or guardians of the serious nature and consequences of this disease and to advise the use of the prophylactic measures designated by the State Board of Health.
- (d) For the purposes of this Act, midwives who, previously, have not been permitted to use medicinal agents under any conditions, may employ the approved prophylactic of the State Board of Health, with the consent of the parent or guardian.
- (e) The local health officer shall investigate each case of ophthalmia neonatorum so far as he may do so without entering the home contrary to the wishes of the parents, and the health officer is required to report all such cases and their results to the State Board of Health.
- (f) It is the duty of the State Board of Health to enforce the provisions of this Act; to provide a prophylactic agent for free distribution together with proper directions for the use of same; to publish and distribute information concerning the dangers and prevention of ophthalmia neona-

torum; to furnish special advice and information to physicians and midwives on this subject; and to bring all violations of the law to the attention of the prosecuting attorney.

(h) Violation of the Act is punishable by a fine of not less than \$10.00 nor more than \$100.00.

A number of new laws have been passed directed toward accident prevention. The most important of these is the Workmen's Compensation Act, known as Senate Bill No. 66. This is a comprehensive law, too extensive for synopsis in these pages. Briefly, it provides and specifies the minimum sum which shall be paid in the event of death or injury of the employee and defines the responsibility of the employer, amending the Acts of 1911 and 1913. While this law is of especial interest from a social and industrial standpoint, it is expected that it will increase precautions against industrial injuries, many of which are eye injuries.

At the annual meeting of the National Medical Association held in Chicago, August 22-27, the evening session of August 25 was given over entirely to a popular consideration of conservation of vision. The meeting was largely attended both by the physicians and by the general public as well, and great interest was manifested in the topics and illustrations. Dr. C. V. Roman, Nashville; Dr. S. C. Dickerson, Chicago; Dr. M. J. Brown, Chicago, and the field secretary of the National Committee presented various phases of prevention of blindness work. Before adjournment a resolution was adopted by the Association signifying its approval of the use of a prophylactic in the eyes of the new born, prompt reporting of all cases of babies' sore eyes to the proper health authorities, endorsing the efforts of the National Committee for the Prevention of Blindness, and urging local medical societies to further such efforts so far as possible in their own communities.

Kansas:—After an examination of a number of adults and children, Dr. Harold B. Woods, City Health Officer, Topeka, reports that he found no trace of trachoma and

now considers the city relatively safe from this dreaded disease.

During the summer the Division of Child Hygiene, Kansas State Board of Health, purchased a number of photographs from the National Committee for publicity purposes.

Kentucky:—In the July issue of "The Modern Hospital" appeared an interesting article entitled "Trachoma in the Mountains of Kentucky," written by Dr. J. A. Stucky, of Lexington, Ky. Dr. Stucky is one of the pioneers in antitrachoma work in Kentucky, and has had a large and unusual opportunity to observe and treat patients from the infected areas. He is furthermore one of the most ardent supporters of the work being done by the Kentucky Society for the Prevention of Blindness.

Due to the efforts of Miss Linda Neville, Secretary of the Kentucky Society for the Prevention of Blindness, the following plank will appear in the platform of the Republican party at the coming state election in Kentucky:

"(14) For economic, as well as humane reasons, we recommend that the State of Kentucky undertake to supplement and later to continue the work of the United States Public Health Service for the prevention of blindness from Trachoma, a communicable and painful disease of the eye, from which the last census report shows that 33,000 persons are suffering in a single section of this State."

Almost identical provisions have also been made in the platforms of the Democratic and Progressive parties of Kentucky, so that the continuity of the remedial campaign now under the direction of the Public Health Service is practically assured, even after that body has deemed it necessary to withdraw from the field. It is interesting to note that this plank is the only one to be found in the three platforms mentioned having to do with public health. Editorial comment has been without exception extremely favorable so that the Kentucky Society for the Prevention of Blindness

may look forward to popular support in the furtherance of its plans.

The serious and economic waste and misery occasioned by trachoma—"a problem more largely economic than any other in the whole field of preventive medicine"—is set forth in a bulletin issued by Dr. A. T. McCormack, Secretary of the State Board of Health, who says that half of those who have it are eventually blind and the usefulness of every patient is greatly decreased. The loss of working capacity is one-fourth, he believes.

Michigan:—As Chairman of the Health and Hygiene Committee of the West Michigan State Fair Association, Dr. Collins H. Johnston of Grand Rapids secured from a number of health organizations exhibits for use at the annual State Fair in September. The entire exhibit on prevention of blindness was shown, and some seventy lantern slides bearing self-explanatory captions were thrown on the screen continuously day and night. Attendance at these State Fairs is very large, hundreds of thousands of persons often coming from all parts of the state to see the agricultural exhibits, races, etc. During recent years health authorities have been taking advantage increasingly of this opportunity to put in some effective popular exhibits and much direct good has undoubtedly been accomplished through this method of reaching the public.

Missouri:—Dr. James A. Campbell, of St. Louis, in a paper read June 29th, before the Ophthalmic Society, in joint session with the American Institute of Homeopathy, warned against the use of wood alcohol. Several cases of blindness were reported due to absorption through the hands. In part, Dr. Campbell said:

"Wood alcohol blindness may occur by inhaling the fumes, absorption through the hands, and one case was caused by its being splashed into the eyes. The symptoms are headache, dizziness, weakness, nausea, prostration, blindness and death. Blindness is a late symptom.

"Wood alcohol blindness is curable if treated early, but if left until nerve degeneration takes place the blindness may be permanent and complete."

New Jersey:—The State Board of Health of New Jersey will co-operate with the State Commission for the Blind in an effort to prevent blindness by a stricter enforcement of laws; particularly does this refer to midwife registry laws and those regulating the sale and use of wood alcohol.

To assist in their educational campaign the Commission for the Blind, Newark, has procured from the National Committee 1,000 compies of Publication No. 1.

The Commission is now completing plans for a series of popular educational meetings to be held during October and November in cities throughout the State, at which demonstrations of the work of the blind will be shown, and an illustrated lecture on prevention of blindness be given. L. Bamberger & Co., of Newark, have offered the use of their large auditorium for one of these meetings, to be held October 21st.

New York:—An important report on the subject of myopia in school children has been made by a committee of experts referring to the conditions in the New York public schools. The questions of proper furniture, lighting, blackboard work, and properly printed text-books are considered. The report is printed in the weekly bulletin of the Department of Health, City of New York, under date of August 25, 1915.

Attention of druggists in New York City has been called forcefully to the provision of law prohibiting the use of methyl alcohol (wood alcohol) in any toilet preparation or medicinal preparation used internally or externally of methyl alcohol. The Department of Health is strictly enforcing this section of the Sanitary Code.

From a report of the Division of Laboratories and Research, Health News, State Department of Health, July, we learned that 3,236 packages for the prophylaxis of ophthal-

mia neonatorum were issued during the month of May, 1915, in comparison with 474 for the same month, 1914.

Some time ago an inspector of the Bureau of Food and Drugs procured a sample of wood alcohol for rubbing from a drug company, in Brooklyn. The alcohol was sold in pint bottles with a label stating the contents to be "alcohol." Analysis showing that the sample was methyl alcohol, prosecution was commenced for violation of the Sanitary Code. The defendant was convicted in the Court of Special Sessions of Brooklyn on June 3, 1915, and was fined \$250. The Justices were so impressed by the health menace occasioned by the human use of wood alcohol that they suggested giving this case the widest possible publicity.

At the last annual meeting of the New York State Pharmaceutical Association the question of the wood alcohol label was discussed and resolutions were adopted requesting the members of the Association and druggists in general to make use of the poison label on wood alcohol which the State Pharmaceutical Association would formulate. President, Arthur S. Wardle, writes: "This year we will have about thirty-seven hundred copies of the Annual Report and one of these copies will go to nearly every druggist in the State of New York whether he is a member of the Association or not, and in this way, those who were not present at the convention will be advised of the action that was taken by the Convention in reference to the Wood Alcohol matter." He further states that the Legislative Committee of the New York State Pharmaceutical Association was instructed, at its annual meeting, to have a bill introduced in the coming session of the legislature, making the use of the advocated wood alcohol label compulsory.

In connection with wood alcohol poisoning, the following news item, clipped from the *New York Evening Mail*, is of interest:

"Up to April 1, from the date of the suppression of the vodka traffic, there have been treated in the Peter and Paul

and Obhovsky hospitals 2,882 victims of methylated spirit drinking. Of these, twenty-seven died.

"In two hospitals for treatment of eye diseases there have been treated 138 patients suffering from partial or total blindness from the same cause. The spirit is obtained by treatment of varnish and eau de cologne. The foregoing is the result of the investigation by a special committee named to report to a military commission."

The Metropolitan Life Insurance Company has recently published a pamphlet entitled "Your Rights and Duties Under the Health Laws of New York City" which is printed and distributed for the use of its Industrial Policyholders. The two following paragraphs, taken from this pamphlet, are of interest to prevention of blindness workers:

"Midwives.—The Law says: Your midwife must be registered and licensed. Be sure that your midwife is registered. If a midwife is not registered and licensed by the Board of Health she does not know her business and is not allowed to practice in this city. Protect yourself by having only such persons as have obeyed the law. A licensed midwife has the certificate of the Board of Health in her office.

"Wood alcohol is a very dangerous poison, and must never be used either for rubbing or for medicine. It often causes blindness. Be sure to keep wood alcohol away from the children."

Dr. W. A. Howe, State Medical Inspector of Schools, has arranged for a series of eight lectures in each of the State Normal Schools of New York, one of the subjects being Conservation of Vision. The idea is to put teachers in position to recognize the grosser forms of eye defects and to use the Snellen Charts.

Steadily increasing free distribution of ophthalmia neonatorum outfits is reported by Dr. Linsley Williams of the State Department of Health. The July report shows 4,998 outfits distributed.

More than one hundred children from the New York public schools were helped to fight their way back to health and good eyesight in the Trachoma Summer Camp located in Orange County. Intelligent treatment during the long school vacation had its effect and the trachoma cases, with the exception of two or three, have almost completely recovered, if not entirely so. There is no more danger that these children will lose their sight either wholly or in part. whole experiment costing about \$3,000 was financed entirely by contributions secured by a leading newspaper. Nearly \$1,000 worth of property, consisting of tents, cots, blankets, cooking utensils, etc., is now in the hands of the managers of the enterprise to be used next year as the nucleus for a bigger camp. Dr. Baker, in charge of the Child Hygiene Division of the City Health Department, considers this one of the most practical plans for child welfare work yet brought to her attention. Sanitary officers from the National Guard and from the New York Department of Health laid out the camp.

North Carolina:—At the annual meeting of the State Medical Society of North Carolina, held in Greensboro June 15th to 18th, the President of the Society, Dr. L. B. Mc-Brayer, in his address, recommended the appointment of a Committee on Conservation of Vision, in order that further constructive plans for prevention of blindness in North Carolina might be carried out through educational and legislative action. It was furthermore proposed by Dr. Mc-Brayer that the committee secure the active co-operation of the Board of Directors of the State School for the Blind.

Acting upon this recommendation the House of Delegates signified their formal approval of same, and by action of the society the following committee was appointed: Dr. R. H. Lewis, Chairman; Dr. W. M. Rankin (Secretary of the State Board of Health); Dr. Louise Merrimon-Perry, Asheville; Dr. C. W. Banner, Greensboro; Mr. John E. Ray.

Superintendent of the North Carolina School for the Deaf and Blind, Raleigh. From such a committee much may be expected. For years as individuals they have been working enthusiastically, and have already secured results that are bound to prove of great humane and economic value to the commonwealth.

The morning session of June 17th was devoted to conservation of vision, representatives of the American Medical Association and of the National Committee for the Prevention of Blindness having been asked to address the meeting, in addition to a number of excellent papers which were read by members of the society.

Exhibits loaned by the National Committee were used in connection with the meetings of the medical association.

Ohio:—In Cincinnati Public Schools the following special provisions are to be made for pupils with weak eyes: Segregation; half shades for windows; woodwork and desks mat finished; cream-colored ceilings and upper parts of walls; buff walls from molding to blackboard, dark brown from chalk tray to floor; scientific artificial lighting; written work on large or desk blackboards; text-books printed in 36-point (one-half-inch type), on unglazed, buff-tinted paper; typewriting by the touch method.

Oklahoma:—"Save the Eyes" was the keynote of a series of addresses delivered from July 6 to 16 at the summer school at Norman, Oklahoma, for the benefit of teachers assembled there and to instruct members of the State Optometry Association who were expected to attend. The addresses were under the auspices of the State University.

Rhode Island:—Through the influence of Miss Mary E. French, Providence, three of the National Committee's largest exhibits were secured for demonstration during the week of a special sale in Newport, July, 1915, the aim being to arouse greater interest in the movement for the prevention of blindness.

Tennessee:—A circular has been issued calling attention to the danger of ophthalmia neonatorum, its prevalence, and describes carefully a method for prevention.

At the request of Mrs. John P. Frank, Council of Jewish Women, Nashville, exhibits on Ophthalmia Neonatorum, Wood Alcohol, and Midwives, were loaned by the National Committee in early September.

Publication No. 5 is being circulated widely and has been reproduced in full in the Southern Practitioner, Nashville. It was written in response to frequent requests from nurses and club women for guidance in initiating or continuing prevention of blindness work. It is a program which might be suggestive to practically any organization, either lay or medical, which could or would include prevention of blindness among its activities.

In pursuance of law the Tennessee Board of Health has announced as a standard prophylactic silver nitrate, 1% solution, and argyrol, 15% solution.

Texas:—An Educational Campaign for the Prevention of Blindness has been conducted by the Texas Congress of Mothers and Parent-Teacher Association since the Fall of 1914. An address was given on preventable blindness by the Superintendent of the Texas State Institute for the Blind during the Annual Child Welfare Conference held in San Antonio last November. At four district conferences the subject was also presented, Dr. John O. McReynolds delivering an especially fine illustrated lecture on the "Conservation of Vision" to a very large audience in Greenville, Texas. Dr. McReynolds is chairman of the Committee on Prevention of Blindness and Conservation of Vision of the Texas State Medical Association, Dallas. The next annual Child Welfare Conference will be held in Dallas, October 26, 27, 28, 1915.

In working toward the betterment of the condition of the blind, the President of the Texas Congress of Mothers purchased 1,000 copies of Publication No. 3, "Directions for the Prevention of Blindness from Babies' Sore Eyes," for free distribution in connection with a study course which has been prepared for the organizations.

The prevalence of trachoma among children in Texas has been disclosed by statistics compiled from data gathered at the various "Better Baby" contest which has been held during the last year under the auspices of the extension department of the University of Texas in all parts of the state except in the far west.

Vermont:—Recently fourteen persons in Bristol, Vermont, were poisoned and died from the effects of drinking whiskey adulterated with wood alcohol they had bought from a druggist. The druggist asserted that he ordered and thought he was using Cologne spirits.

Wisconsin:—By request of Miss Bertha Roderick, Superintendent of Children's Home Association, Superior, Wisconsin, 200 copies of No. 1, "Common Causes of Blindness," were ordered from the National Committee for distribution from the Child Welfare Exhibit held in conjunction with the County Fair in Douglas County, Wisconsin, the week of September 21st.

Persons actively interested in the Wisconsin School for the Blind secured from the National Committee 1,000 copies of Publication No. 2 and 1,000 copies of No. 3 for distribution in connection with demonstrating their work at the State Fair in September.

Canada:—From Toronto we have the encouraging report that the women's clubs and nursing organizations are cooperating with the National Committee for the Prevention of Blindness, and accomplishing a great deal of good. These clubs pay special attention to the prevention of blindness from ophthalmia neonatorum, the carelessness of midwives, faulty conditions in schools, accidents and wood alcohol.

# Pbitnary.

MRS. FLORENCE NIGHTINGALE WYETH, wife of Dr. John A. Wyeth, of 244 Lexington Ave., New York City, died September 24. She was the daughter of the late Dr. James Marion Sims, who at one time was president of the American Medical Association. Dr. Wyeth was founder of the New York Polyclinic Medical School and Hospital, and formerly president of the New York Academy of Medicine, and also president of the American Medical Association. Dr. and Mrs. Wyeth were married in 1886.

## Editorial.

#### HEALTH.

On Sunday, October 17, ult., was instituted a movement in the capital city of Tennessee in behalf of better health conditions, and in a large number of the cits churches addresses were made by leading members of the medical profession and others on health and the prevention of disease. Sunday and the Monday following had been designated by the local branch of the Southern Sociological Congress as the days for the campaign in Nashville; other days having been set apart for a like purpose in other sections of the State.

This movement on the part of the congress was started at its convention in Houston, Tex., last spring, when it was decided to devote the entire time of the sessions hereafter to one subject instead of five or six as heretofore has been done.

It also was planned to have every capital city in the South hold health campaigns of two days or more before the next convention in New Orleans next March. The whole purpose of the health campaign is to enlighten people to the great necessity of combatting diseases and epidemics by prevention and to show them the relation between this kind of work and Christianity.

For the protection from disease and the preservation of health, there are certain duties and functions that belong to and devolve solely on the national government, and that can be effectively and satisfactorily discharged thereby; others pertain to the state; others to the municipality or locality, and yet others to the individual.

The United States Public Health Service—an outcome of the Marine Hospital Service—under the control and direction of the Department of the Interior, as at present organized is the best and most satisfactory that has yet been essayed; however, it might and we hope eventually will improve by giving it greater scope and power. This subject has been previously discussed in the pages of this journal, and possibly will be again at some future opportune time. Our State Board of Health also is possibly at its highest water-mark of attainment; although there is room for improvement, dependent largely upon future judicious legislative enactment. Our County and City Boards of Health will compare most favorably with any others in cities of like size in any other section of our great republic.

When it comes to the individual, the question of health is largely one of knowledge and information—to which may be added a disposition and a willingness to avail oneself of the knowledge and information that he has or can acquire. Ignorance and superstition are twin sisters that go hand in hand to the great detriment of both individuals and communities. Unfortunately, more than one-fourth of our citizens are addicted to, or we may say, afflicted with both.

The colored citizens, especially in the Southern States, by reason of their ignorance, stupidity, superstition, etc., are a menace to the white race. They know but little of, and care less, for the dangers due to bad air, impure water, improper food, uncleanliness of person and environment, ochlesis, etc., and other measures of personal hygiene, leaving a wide field for general, personal and special instruction. Furthermore, not only our colored people, but some—and not a few of the white race—are only too prone to "kick against," obstruct, oppose, and even try to evade some very essential regulations of our health authorities.

This is not as it should be, and is solely due to ignorance or stupidity and "pig-headedness." For instance, it is unfortunate—even a hardship, say in a family of three, five or more children of scholastic age, when one of them is reported as suffering from diphtheria, scarlet fever, or some other infectious disease, to have all the others, no matter how well they may be at the time, excluded from school until all possibility of transmitting the disease is past. Yet, it would be far more unfortunate and a greater hardship to a far larger number of children to have the infection communicated to several families or to a majority of the pupils in that school. In this, and in other points of well recognized, accepted and established facts in the prevention and restriction of disease, our health authorities should at all times recive a willing, hearty, earnest and thorough support and co-operation.

We most sincerely and earnestly commend and endorse the movement instituted by the Southern Sociological Congress-let the good work go on, and we hope that like measures of education and instruction of the people will be persisted in, regularly, systematically and untiringly. In conclusion, we beg leave to suggest, that for the past few summers our good citizens of Nashville have overlooked a most excellent opportunity of educating our people along the lines of health preservation and protection; and mention it here with the possibility of its being resorted to in the future. To add to the comfort and enjoyment of the "stay-at-homes"—those who cannot seek the sea shore, the rural retreat, the mountain top or other health resort during the heated term of June, July and August, our city authorities have employed a good band of musicians to entertain them in our city parks each night in the week, including Sunday afternoon and evening. This could have been supplemented, and we hope will be in the future, by a thirty minutes talk on the all-important subject of health. These lectures, addresses, or "talk-fests" should not be over twenty or thirty minutes in length—the band usually requiring an intermission of about that period, and such an interlude could and would be both attractive and instructive. We have plenty of well equipped doctors who will gladly do their part; yet we might add some of our able and competent lawyers who could present some of the legal aspects of sanitation, as well as some of our preachers and other scientists than doctors who can instruct along special lines.

### AUTOMOBILES—SUPREME COURT DECISION AS TO RESPON-SIBILITY OF DRIVER.

A very important decision was recently handed down by the Supreme Court, in session at Knoxville, in regard to driving an automobile in excess of twenty miles an hour in which the court holds that the driver is not only violating the law, but that in case of an accident while driving in excess of this rate there can be no contributory negligence, and that there can be no defense for the driver.

The opinion, handed down by Justice Neil, was in the case of Max Lauterbach vs. the State of Tennessee, in which it was shown that a child by the name of John D. White was run over and killed by Max Lauterbach on St. Elmo Avenue, in the village of St. Elmo, in Hamilton County, and that the child broke away from his sister and ran directly in front of the machine, which was driven by Lauterbach and going more than twenty miles an hour at the time. The court holds that no contributory negligence could prevail and that Lauterbach was guilty of involuntary manslaughter.

The opinion in full, read by Chief Justice Neil, is as follows:-

"Max Lauterbach vs. the State—Knoxville, September term, 1915. Opionion.—Plaintiff in error was indicted in the Criminal Court of Hamilton County for 'unlawfully, feloniously and recklessly' driving an automobile upon John D. White and thereby causing his death. 'At the time,' continues the indictment, 'said Max Lauterbach was driving said automobile along St. Elmo Avenue, a public thoroughfare, at a rate of speed in excess of twenty miles an hour and in disregard of the presence of said John D. White. Whereby the grand jurors present that the said Max Lauterbach has committed involuntary manslaughter,' etc. He was convicted and sentenced to an indeterminate period of from one to five years in the state penitentiary. He has appealed to this court and has assigned errors.

"The weight of the evidence shows that on the occasion referred to the plaintiff in error was driving his automobile at the rate of from twenty-five to forty miles an hour, as estimated by the various witnesses who testified. The weight of the evidence further shows that John D. White, a child six years old, was walking with his sister on the west side of the avenue, within the traveled way, there being no sidewalk at that point. His sister held him by the hand, but he suddenly jerked away just as the automobile was approaching, ran in front of it and was killed.

"An act of 1905, chapter 173, provides 'that no automobile shall be run or driven upon any road, street, highway or other public thorough-fare at a rate of speed in excess of twenty miles per hour." Section 6 of the same act makes the violation of any of the provisions thereof a misdemeanor, punishable by a fine of not less than \$25 nor more than \$100. St. Elmo Avenue is a much-traveled street in the town of St. Elmo, in Hamilton County.

"It is insisted for plaintiff in error that under the facts stated his conviction was erroneous. We do not think so. His violation of the statute by running in excess of the speed limit there prescribed was negligence. One who kills another in the act of committing such negligence is guilty of felonious homicide. State vs. Campbell, 82 Conn., 671; 18 Ann. Cas., 236; State vs. Goetz, 83 Conn., 437; 76 Atl. 1, 30 L. R. A. (N. S.), 459; Schultz. vs. State, 898 Nebraska, 34, 130 N. W., 972; 24 Ann. Cas., 495, 33 L. R. A. (N. S.), 403. And the rule is general at common law that one who kills another while committing an act of negligence is guilty in like manner. See extended note to case of Johnson vs. State, 61 L. R. A., 277 et seq.

"The plaintiff in error is not relieved by the fact that the child ran suddenly in front of the machine. One who is engaged in the performance of an unlawful act must take the criminal consequences of whatever happens to third persons as a result of that act. It was his duty to anticipate that he might encounter not only grown persons, but even little children; or even people who were afflicted with blindness of deafness. One who disobeys the statutory rule as to speed is acting in defiance of law and must be held to have anticipated the possibility of any injury caused by his recklessness.

"The little child was too young to be guilty of contributory negligence; but even if it had been a person who had arrived at years of discretion, and he had committed an act similar to that of the child, the plaintiff in error would not have been free of criminal liability, since the rule of contributory negligence does not apply in criminal cases. State vs. Campbell, supra; Reg. vs. Longbottom, 3 Cox C. C. (Eng.), 439, Reg. vs. Kew, 12 Cox C. C. (Eng.), 335; State vs. Moore, 129 Iowa, 514, and other cases cited in note to Schultz vs. State, 24 Ann. Cases, 1912 C., 501 et seq.

"An instruction was offered in the trial court to the effect that if the jury should find that the death of the child 'was caused by his suddenly breaking loose from his sister and running into the automobile,' the plaintiff in error could not be convicted. In response, the trial judge said: "The court gives you that instruction, gentlemen of the jury, and further states to you this proposition again, that if the reckless running of the machine caused the death of this child, then he is guilty; if it did not, then he is not guilty.' From what has been already said it is apparent that there is no error in the foregoing of which the plaintiff in error can complain. In our judgment the instruction, as requested, should not have been given at all.

"There were certain improper statements made by the district attorney-general in his address to the jury to the effect that if anybody should run over a 6-year-old child of his he would take a cannon and shoot him. On objection being made by counsel for plaintiff in error the attorney-general said that he knew that it was against the law to do such a thing, but he would do it. These were very improper statements and should have been rebuked by the trial judge. We do not think, however, there should be a reversal on this ground. The conviction was thoroughly grounded on the evidence, and we do not think that these improper statements, made by the law officer of the state, influenced the verdict. This being true, we cannot reverse. Acts of 1911, chapter 32.

"There being no error in the judgment of the trial court, it must be affirmed.

NEIL, Chief Justices"

The auto is one of the most useful and beneficial developments of recent years, and greatly widens, especially, the doctor's field of work. Readily and easily put into action and in localities where good roads are in vogue, it is a great time-saver, a convenience, and invaluable

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as a means of transportation. Furthermore, they will eventually develop good roads throughout the country; however, like some other "good things," they are dangerous to life and limb, and proper and efficient regulations are absolutely essential.

This ruling of our State Supreme Court will doubtless cause many users of so valuable an addition to our means of transportation to be more careful than they have been; yet there are far too many reckless, irresponsible and careless individuals who at times have charge of the "steering wheel," who will take chances of violating any statutory enactment.

As a sanitary measure, a means of saving the lives and preventing physical injury of those who may not occupy the "joy wagon," those limited to less speedy means of "getting over the ground," the possible wayfarer trudging along on foot, we would suggest that our national lawmakers enact a plain, but positive and rigid law, prohibiting the manufacture of any machine or road vehicle capable of greater speed than twenty miles an hour. Greater speed than this is absolutely too dangerous, for use, unless on a metal track with a flanged wheel, and a right of way. Exception could be made for autos for government use in the army, etc. We have laws limiting their speed on public highways, then why make a machine that cannot be legally used?

THE CONSTIPATION PROBLEM:—It is perhaps a conservative estimate that three out of every four individuals suffer in greater or less degree from constipation. The proportion so afflicted is certainly much greater than it was forty, thirty or even twenty years ago, this abnormal condition being commonly attributed to our so-called higher civilization. Lack of exercise probably plays a large part in the equation. The use of concentrated food-stuffs is undoubtedly another etiological factor. So widely varied are the specific causes, numerous remedial agents are necessary to meet the differing indications. Of late the "mechanical" laxative has been receiving attention from many therapeutists. There would seem to be warrant for this innovation. Obviously there are cases of constipation in which the use of an efficient intestinal lubricant or simple carbohydrate would be preferable to that of the cathartics commonly prescribed.

Of the various mechanical laxatives which are being offered for the consideration of physicians it is doubtful if any are more serviceable than American Oil (a colorless liquid petrolatum), and Agar (a Japanese gelatin derived from seaweed), both marketed by Parke, Davis & Co. Each of these products, after ingestion, passes unaltered into the intestine, no particle of it being digested or absorbed.

American Oil is a colorless, odorless, tasteless liquid petrolatum. As its name implies, it is of American origin. It is guaranteed to be

free from any active or harmful substance, and to be fully equal to the best Russian oil formerly imported. It is of greater viscosity than most of the liquid petrolatums that are being offered, for which reason it is more efficacious as a laxative. The customary prescription is one tablespoonful of American Oil, before meals, two or three times a day. After the fourth or fifth day, when the desired effect is established, the amount may be reduced.

Agar, supplied in the form of dry granules, absorbs water and merges with the feces, keeping them uniformly moist and thus aiding peristalsis. One or two heaping tablespoonfuls, morning and evening (with milk or cream or mixed with a cereal food) suffices for the average patient.

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

"INTEROL" IS AGAIN OBTAINABLE:—We have at last succeeded in procuring an American oil good enough to bear the name of "Interol," which we will continue to supply through the drug stores.

This oil complies with every chemical requirement we demanded of our foreign product, so that our friends are once more assured an oil free from "machine oil taste," from "lighter hydrocarbons" (no danger of renal disturbance), and from sulphur compounds (no possibility of intestinal disturbance). No acid, no "bloom," no odor, no taste—but a little thinner.

Your constipated and "stasic" patients are once more assured in "Interol," an unrestricted supply of a flavorless, effective and safe mineral oil, so that you are enabled to continue the mechanical treatment of chronic constipation and intestinal stasis with a dependable product.

Every druggist can now obtain "Interol." Booklet upon request. Van Horn and Sawtell, 15 and 17 East 40th Street, New York City.

IN THAT CONFINEMENT TEAR, if you prefer using an absorbable suture material, the "Van Horn Obstetrical Suture" of Special Chromicized Catgut is safe against premature absorption—which is not always true of ordinary catgut. This special catgut has been chromicized to hold for seven to ten days in spite of the lochia. It is threaded on a suitable full-curved needle put up in a glass tube, sterile, all ready for immediate use.

However, if you prefer a non-absorbable suture for this class of work, there is the "Van Horn Obstetrical Silk Suture" and the "Van Horn Obstetrical Silkwormgut Suture." These sutures are also supplied with suitable needles, sterile, in hermetically sealed glass tubes. At your dealer, 25 cents each, or sent upon receipt of price Van Horn and Sawtell, 15 East Fortieth Street, New York, N. Y.

REDUCTION OF NERVE TENSION:—One of the most positive therapeutic powers possessed by Pasadyne (Daniel), the Concentrated Tincture of Passiflora Incarnata, manifests itself in states of a high nervous tension. As a rule, the sufferers are poorly equipped with moral resistance, and consequently it is of the highest importance in choosing remedial measures to guard against agents which might establish habit. In using Pasadyne (Daniel) the physician need not give this possibility any heed, for it is quite free from such a disadvantage. In a wide variety of nervous affections Pasadyne (Daniel) is of the utmost value, which is further enhanced by its freedom from evil consequences. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Geoogia.

GRAY'S GLYCERINE TONIC COMP. has proven its value beyond all question during the twenty-five years it has been at the command of the medical profession.

It is simple yet appealing in its composition; the ingredients of "Gray's" are selected and combined with a care to quality and uniformity that assures therapeutic effects impossible to obtain with nondescript substitutes.

The success of "Gray's" is a success built upon efficiency and reliability—the attainment of results; in no other way could it have won the regard and confidence of the thousands of physicians to whom it is "the first thought" whenever a tonic is needed.

TONGALINE:—All the Salicylic Acid in it is made from the Natural Oil and not from Coal Tar. No imitation; no substitute. No extemporaneous prescription can possess the same beneficial properties or give the same satisfactory results as Tongaline.

PHENALGIN:—No matter how severe or where located pain is promptly and satisfactorily controlled by this effective anodyne—and without disturbing the digestion, suppressing the secretion, causing constipation or inducing a drug habit. This is why Phenalgin has superseded opium and its derivatives for relieving Headaches, Rheumatism, Gout, LaGrippe, Lumbago, Neuralgia, Disorders of the Female, Dysmenorrhea, and Painful Conditions generally. To thousands of physicians Phenalgin "is the one dependable analgesic—the logical supplanter of opium."

IN MOOST CASES OF CORYZA, cystogen in full doses (gr. X-XV, 4 times daily for an adult) acts promptly and effectively if treatment is given at the inception of the attack. The irritation is relieved, the watery secretion is checked, and the "stuffiness" and headache disappear.

Where the "cold" is well established, this treatment will materially shorten the infection, reduce the quantity of purulent secretion and lessen the danger of complications such as sinusitis, otitis media, and bronchitis. Cystogen Lithia is a most elligible preparation.

A ROUTINE PRACTICE:—To guard against them from the bronchial and pulmonary inflammations to which they are usually susceptible, many physicians make it a routine practice to put the weak and anemic members of their families on Cord. Ext. Ol. Morrhuae Comp. (Hagee), just as soon as cold and changeable weather sets in. The value of this preventive measure lies in the power of the Cord. Ext. Ol. Morrhuae Com. (Hagee) to make blood and add resistance to tissues.

THE KENTUCKY STATE MEDICAL ASSOCIATION, at its annual meeting in Louisville, September 21-23, elected the following officers: President, Dr. Ap Morgan Vance, Louisville; Vice Presidents, Dr. M. F. Hoag, of Quicksand; Amos Davis, of Eastington, and J. B. Mason, of London; Secretary, Dr. A. T. McCormack, of Bowling Green; Delegates to the American Medical Association, Drs. W. W. Richmond, of Trenton, and Carl Louis Wheeler, of Lexington.

FUNCTIONAL HEART DISORDERS resulting from faulty innervation or fatigue are promptly relieved by Cactina Pillets. Made from Mexican Cereus Grandiflorus, this time-tried preparation provides a safe and effective means of steadying and strengthening the weak, irregular or rapid heart. A true cardiac tonic without cumulative action.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION at its recent session held in Lexington, Ky., October 19, 20, 21, ult., elected Dr. William J. Stone, of Toledo, O., President. Dr. Henry Enos Tuley, of Louisville, was re-elected Secretary, and Dr. S. C. Stanton, of Chicago, Treasurer. Indianapolis was selected as the place of meeting in 1916. About 300 members were in attendance, and the work in both sections was most satisfactory and enjoyable.

VANDERBILT UNIVERSITY:—The college work for the ensuing year at Vanderbilt University Medical School opened with more than 300 applicants for admission to the freshman class. A large majority were denied admission on account of the rigid enforcement of the revised standards of the University which has enjoyed the distinction during the past year of being placed in Class A plus by the Committee of the A. M. A.

SLEEPLESSNESS depending on nervous excitation, reflex conditions, vasomotor disturbances or the various neuroses—is especially amenable to the bromides in the form of *Peacock's Bromides*. This is due, not alone to the purity and quality of the several salts entering into the composition of this product, but also to their particular combination which assures *maximum* therapeutic action with *minimum* untoward effect.

DR. BLUE HONORED:—Trustees of the American Medicine Gold Medal Award have unanimously selected Surgeon-General Rupert Blue, of the United States Public Health Service, as the American physician who did most for humanity in the domain of medicine during 1914, and have therefore awarded him the 1914 gold medal for his work in national health and sanitation.

THE SCIENTIFIC PRINCIPLES on which Antiphlogistine was originally compounded, have always been the common property of the Medical profession. The faithfulness with which the original product has, for more than 20 years, been maintained, remains the proud stewardship of the original makers.

A TRUE HEPATIC STIMULANT:—Whenever it is necessary or desirable to increase the functional activity of the liver without producing catharsis, *Chionia* will be found of exceptional value. Remarkably useful and effective in the treatment of Biliousness, Jaundice, Intestinal Indigestion, Constipation, Hepatic Torpor, etc.

PRUNOIDS:—A laxative that acts by stimulating physiologic processes; does not gripe or produce after-constipation. Remarkably effective in the treatment of chronic constipation and all intestinal conditions requiring safe, pleasant and dependable action.

### Selections

NEW TESTS OF DEATH:—It is quite natural that the subject of the speedy and accurate diagnosis of death should receive increasing interest in those countries in which the business of killing seems to have supplanted all other forms of human activity. Three methods of determining the cessation of life are discussed in La Clinica Medica Italiana, 1915, No. 3. The first of these is the ether test. A drop of ether is instilled into the conjunctival sac of one eye. If this is followed by a reddening of the conjunctiva it affords proof that the circulation is intact and that life is still present. The other eye is used as a control. The second test has recently been proposed by Icard. It consists in the subcutaneous injection of fluorescin, which, if the individual is still living, is soon followed by a yellowish coloring of the skin and mucosa. The conjunctiva and the mucous membrane of the mouth, and particularly of the frenum of the tongue, show this coloration most distinctly. The test consists in the injection of 8 to 10 c.c. of a solution of 20 grams of fluorescin and 30 grams of sodium carbonate in 100 grams of distilled water. A negative result is obtained in cases of marked slowing or enfeeblement of the circulation, as during the agonal condition. The third test has recently been proposed by Halluin. It consists in direct exploration of the heart by means of a stilette. This is introduced through a small incision in one of the intercostal spaces. Any movement in the heart is communicated to the stilette. In some instances of suspended animation it is possible to arouse cardiac activity by means of gentle movements of the stilette, combined with artificial respiration.—N. Y. Med. Record.

THE USE OF PICRIC ACID IN BURNS:-A one per cent solution of picric acid in water forms a saturated solution of great value in the treatment of burns and scalds at the first onset. Its use depends on the well known fact that picric acid coagulates albumin, thus forming a protective, antiseptic covering to the injured part. The dressing may be left in place for forty-eight hours without changing. A second application of picric acid is unnecessary: indeed. the only ill-effects recorded as to the use of picric acid were in cases where repeated applications were made. A signal advantage connected with the use of picric acid in burns and scalds lies in the prompt cessation of pain in the injured part. In burns of the eye a two per cent ointment of picric acid, preceded by the instillation of a little cocaine, has been recommended. For the removal of the somewhat persistent vellow stain it has been suggested that. after forty-eight hours, the parts be washed with a solution containing five grains of potassium permanganate in one pint of water, afterwards washing with weak ammonia solution, and then with hydrogen peroxide. Many practitioners have obtained good results by using a 1 in 200 solu-The necessity of making a prompt application in cases of burns suggests the wisdom of keeping on hand one or two pints of the saturated aqueous solution of picric acid for emergency use in the office, or surgical ward.— St. Paul Medical Journal.

THE LACTOSE TREATMENT OF DIABETES:—For a long time it has been known that the administration of lactose in some cases of diabetes is followed by a marked diminunition or even a disappearance of the glycosuria. Fernand Farges (Gazette Hebdomadaire des Sciences Medicales de Bordeaux, June 6, 1915), reports the excellent results he has obtained with this method in a series of seven cases of diabetes. In some of the patients the diet was restricted to two quarts of milk daily with the addition of from 20 to

30 grams of lactose, and in other cases the patient continued his regular diet to which the lactose was added. In most of the cases the sugar disappeared completely from In other instances the glycosuria was considthe urine. erably diminished. The author concludes from his experience that lactose is completely assimilated by the diabetic-At the same time it appears to augment the assimilation of other carbohydrates that are ingested with it. Lactose is ordinarily a diuretic, but in the diabetic it has the opposite effect. As a supplementary article in the diet of typhoid fever and other diseases requiring an easily assimilated nutrient, milk sugar plays an important role. In diabetes its role is a double one: First, as a nutrient, and second, as an agent that greatly increases the carbohydrate tolerunce of the individual.—Med. Record.

TREATMENT OF TYPHOID: -J. Feldner (Wiener Klinische Wochenschrift), is an ardent advocate of the starvation treatment of typhoid, insisting that the experience of years has established that the disease runs its most typical and mildest course when the patients are not fed by the mouth. He says that Abderhalden's protective ferments amply explain the advantages from refraining from feeding typhoid Nature takes away the appetite, as the protective ferments are needed in the blood to combat the bacteria and their products. When food is given by the mouth, the ferments have to go into the digestive tract to take care of the food, and the blood thus loses a large proportion of its means of defense. Saline infusion also promotes the vital, the defensive processes, he thinks, as it weakens some inhibiting function, by diluting the blood, and thus leaves free play to the defensive forces. In the test tube, intensity of agglutination may increase as the serum is more and more diluted, and there is every reason to assume that this occurs with saline infusion in the body. Hence treatment of typhoid, he declares, should consist of deprivation of all food, "absolute starvation," to divert the protective juices into the infected blood, and copious saline infusion for specific concentration of the defensive forces.

TREATMENT OF ECZEMA WITH HOT BATHS:—Cæsar Philip (Dermatol, Wochenschrift) (August 29, 1914), says that he is accustomed to treat many cases of eczema of the hands, and has obtained good results in the following way: Whatever the form of the eczema, the patient washes his hands for half an hour morning and night in hot soap and water, as hot as can be borne. The hands are then thoroughly dried and Unna's compound ointment of resorcinol (resorcinol, ichthyol aa 5.0, acid salicylic 2.0, petrolatum ad 100.00) is spread thinly over the diseased parts, covered with a thick layer of cotton and bandaged on. or if the bandage is impossible because of the daily work. gloves are worn. This treatment is maintained for from four to eight days until the eczematous layers of the skin have been cast off and the itching has completely disappeared. For another week the hands are bathed in the same way for a quarter of an hour in the evening and then covered with a simple zinc paste or ointment with the addition of oleum rusci day and night. A complete healing is usually obtained in from ten to fourteen days, and it is only in rare cases that he has to treat recurrences, for which the same treatment is repeated.—Critic and Guide.

A PIONEER IN PROPHYLAXIS:—The subject of our biograph was a physician, a teacher, a man of letters, and an American. Years before anything was known of the relation of bacteria to diseases the subject of our biograph correlated his own keen clinical observations with the experience of others, and pointed the way toward surgical asepsis—one of the great advances in medicine. His masterly essay on the "Contagiousness of Puerperal Fever," wherein he laid down certain rules to prevent transmission of infec-

tious agents, stands to-day among the great literary landmarks in the history of medicine. Though forced to combat, in his own profession the deepest skepticism and the most marked opposition to his thories, he lived to see his ideas triumph, and his teachings are now followed by obstetricians and surgeons throughout the world. Let us, therefore, join in honoring Oliver Wendell Holmes, physician, teacher, and man of letters.—Weekly Bulletin of the New York City Department of Health.

EARLY DIAGNOSIS OF INCIPIENT PULMONARY TUBERCU-LOSIS:—Lawhorn (Arch. of Diagnosis) points out that the presence of fine rales, whether at apices or elsewhere, in persons suspected of having pulmonary tuberculosis, affords the earliest positive sign of the disease. To bring out these rales, the author advocates Beifeld's method. He has, however, modified the method somewhat. The patient is instructed to count repeatedly in whispers "one, two, three," six or more times, in the same outgoing breath, and then to cough also in the same breath, taking care not to inspire at all before the cough, then to inspire deeply, immediately after the cough. The patient will always spontaneously take a deep inspiration after the cough.—Critic and Guide.

URTICARIA:—Bouchard uses the following application to the affected parts:

R	Cocainæ Hydrochlorati	s,
	Chloralis Hydratis,	
	Resorcini	ana gr. xxx
	Glycerini	3iss
	Spiritus Rectificati	5iss
	Aquæ Laurocerasi	<u>.</u> ℥ij
	Aquam destillatam	ad 3vj
Misce	. Fiat lotio.	-The Practitioner.

### THE SOUTHERN PRACTITIONER

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### DEVOTED TO MEDICINE AND SURGERY

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## Priginal Communications.

### THE MARGIN OF DANGER\*

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Every operation, however slight, is attended by a certain danger, just as every phase of human activity has its attendant risks. Hence, when any surgical procedure is undertaken, it must be with a tacit, if not with an expressed understanding, that it is not absolutely safe. Every pathologic lesion has its danger, especially those which are subject to relief by surgery; or if surgery be undertaken for the relief of conditions of a non-pathologic nature there is a certain cosmetic reason or a mechanical reason which in the patient's and the surgeon's mind justifies the risk incurred by its correction. So in surgery, the theory on which we base our justification is that we shall play a small surgical risk against a great pathologic risk, amounting in many instances to practical certainty; or against the incon-

<sup>\*</sup>Read at regular meeting of the Nashville Academy of Medicine, Tuesday, November, 2, 1915.

venience of conditions which of themselves offer no danger to the life, no incapacity to the function of the patient. In other words, every operation is a gambler's chance, a bet of ten or fifty or a hundred or a thousand to one in favor of surgery. But even with the odds so much in our favor the game goes against us often enough to keep us alive to the fact that there is an eternal uncertainty about our work, and that even in the most favorable cases of one thousand to one the balance sometimes turns the other way and deals a stunning and surprising blow. In other words, there is a margin of danger in all surgical work, a margin that has been wonderfully reduced in the last quarter of a century, so wonderfully that it has enabled many men to undertake surgical work who are in no sense of the word surgeons. I have written this paper to raise the question whether the margin of danger has been reduced to a minimum, or whether we can by a little more careful work, with, it is granted, a little more expense to our patients, further reduce the danger. For example, I saw a patient a few days ago who required an hour to make up his mind whether he would have a skiagraph to determine if an operation would relieve a serious bone lesion in his wife, or the operation to avoid the expense of a skiagraph. He finally had the skiagraph and the futility of the operation was demonstrated. He would have decided this case in five seconds had he been ill instead of his wife. The skiagraph cost him fifteen dollars; it saved him one hundred and fifty; but above all it avoided the subjection of his wife to the unnecessary risk of surgery that could not have benefited her.

A prime factor in maintaining a high mortality, at least higher than it ought to be, is this very failure to thresh out diagnoses completely before we operate. Operations are often indicated when they cannot be justifiably done; they are sometimes done when they are not indicated. We would often avoid chagrin by learning this before rather than during the operation. It is not enough to know even

that an operation is definitely indicated. We must know the patient's general condition, i. e., whether he can stand such an operation; we must study heart, blood-vessels, kidneys, lungs, and especially the central nervous system. is only a few days since a colleague told me of a tabetic who had three or four major operations without any relief to the crises. It is said sometimes that Dr. So-and-So will make his diagnosis and operation much cheaper than the least cost of the work. We all know that for there are charges so habitually low that they drop below the lowest limit of honesty. The man who charges nothing does nothing, and later fools you into paying for something he has done wrong or unnecessarily. Pay nothing, get nothing. Try it on the ticket agent, and you will walk; try it on your grocer: you will starve; try it on your doctor, and you will die and you will have no one to blame but yourself.

There are cases so easy of diagnosis that a layman could not fail to recognize their nature. There are others so difficult that days and days are required to recognize their true nature; and during these days much expensive work must be done by experts in the laboratories to unravel the cause of the trouble. Formerly one looked at the tongue, said "malaria, calomel and quinine; fifty cents;" and it wasn't worth that. But those days are gone. I would hate to meet all the hosts who have died of appendicitis and had their death certificates filled out "colic" or "cramp colic," or "belly-ache," or "locked bowels;" or that other unnumbered host of gall-bladder and cancer of the stomach cases that had some good ignorant gentleman certify and swear to it after their demise that they died of "indigestion." He may have done his best, may still be doing his best, but that should not be a hindrance to the profession as a whole and render us mentally paretic and take away from us all ambition to do scientific, honest work. And yet there are men who look as if they had brains in their heads, men who can actually read and write, who will tell you that those tongues

and pulse snap-shot fellows were better doctors than we are now. If that is true, God pity us now, us and our patients. Seriously, the most important thing in reducing our mortality is diagnosis, and no man can make a diagnosis cheap. When it's cheap, it's a guess; if that's what they want let them guess themselves and spend the money on their own prescription and take it regularly until they get sick enough to need a doctor; then send for him and give him a chance to study the case and learn what the trouble is.

I would suggest as second in importance only to making a diagnosis that procrastination is responsible for increase in mortality, and it is almost altogether avoidable. Let us see. A patient has so simple a thing as tonsillitis; the tonsils are chronically inflamed. They should be removed; the risk is small; the cervical glands begin to enlarge; later begins a cough, an afternoon rise of temperature, weakness, loss of weight and so on. The tonsils are removed with a little less safety and the patient goes on and dies, because the thing that surgery could have done is now impossible. The barn door was closed too late.

Take another case. Little Joe has appendicitis; he has had three attacks; they refuse to let him be operated on. Finally, it comes again and comes hard. It ruptures; peritonitis develops. Little Joe's abdomen swells up, his bowels cannot move, he vomits incessantly, his pulse runs away, he is perspiring, his little listless eyes are sunken and turned upward, and the surgeon is rushed to the scene to do something as a last chance. The child is operated on and shortly thereafter the Angels of Heaven rejoice over Joe's advent. And I imagine that if there is justice up there many a father and mother will have to give account for their failure to listen to the voice of science, as some faithful physician stood pleading with them for a child's life while there was yet time. The margin of danger will not be sufficiently narrow in appendicitis until the people learn that appendicitis means surgery at the earliest possible moment.

mortality of unruptured appendices is at the most one-fifth of one per cent.

Let us take still another instance, that of hernia. Operation has a mortality of one-tenth to one-fifth of one per cent. Let it become strangulated and the operation is attended with a frightful mortality reaching as high as sixty per cent; the risk being increased six hundred fold by procrastination. The profession can do much to correct this tendency by making statements only when they know the facts. Guessing instead of diagnosis always reacts harmfully on us.

The third phase of this question is preparation of patients for operation and avoidance of undue haste to get them to the operating table. However great the hurry of the surgeon, the physician, the family, or even the patient himself. we have no right, utterly, to consent to or to advise a course that would add even a small fraction to the danger of our operation or refuse to do any small thing that would add to its safety. Certain patients will insist upon going where they can get their own desires executed, others will refuse operation in consequence of deliberation afforded by the delay: and yet others will, by virtue of immediate improvement of their condition, decide not to have an operation now or maybe at all. Personally I have had all these things happen to me. Still after the most mature deliberation in which I have reviewed a few unfortunate results, it is more and more a certainty in my mind that hasty work is not wise work except in those cases in which there is unquestionable emergency. It is science and God we are serving and if some other interest conflicts with these the other interests must be accepted as being of minor importance.

The home is the little kingdom around which center the eternal forces of highest civilization, from which emanate the elements of strength and uprightness. It has been created with this end in view, doubtless. But the home is not a hospital. However quiet and lovely and sweet and cheerful it might be, there are wanting certain necessary factors

that cannot be supplied; and there are present certain harmful elements that cannot be eliminated, that render it and will always render it something short of ideal for treatment of surgical cases. I operate rather too frequently in homes myself and consider occasionally that it is absolutely necessary: but I never do so without admitting to myself that I am thereby deliberately or of necessity permitted the risk to the patient to be increased in the sum of about one hundred per cent. I am sure that case for case the mortality is twice as high in the home as it is in the hospital; I say this in spite of the fact that some of the most brilliant results it has ever been my privilege to attain have been in private homes and occasionally in hovels. But no other explanation can be offered except that "God tempers the wind to the shorn lamb." As the people realize more fully what the hospital is, what the immense detail of preparation means and how impossible it is to meet emergencies outside of the hospital, and when they understand that with the hospital and the physician disease and its cure are a business; when they learn that what they need is not sympathy and tears but knowledge and skill; when they learn that the surgeon is not a nurse, then they will gain a correct, economic view of the hospital and not till then. I would rather be cured by a scientist who attended to his duties scrupulously than be killed by a sugar-mouthed fool holding my hands and shedding crocodile tears over the pillow of my last repose. Gray matter is what counts in the cure of illness; if you want tears make them; the formula is the same as that for normal salt solution Let me repeat—the cure of disease is a serious business, and nothing else.

It may sound absurd for me to comment on another item, but it is of vast importance. Did you ever wonder when you watched a clinic and saw the surgeon performing dramatic stunts that he was playing to the galleries more than he was considering the welfare of the patient? Well, he was, positively. Show and speed of the hasty kind are incom-



patible with thorough work. Drama for the stage, speed for the race track, thoroughness for the operating room. I am not pleading for recognition of the man who has so little skill and knowledge that he requires undue time for the performance of his operations. But I am insisting that the man whose attention is riveted upon getting through with an operation in the minimum of time to show his speed to the onlookers and then boasts about it, is considering his personal advertisement more than the life of his sleeping patient. Much was said a good many years ago about "free incisions, bold incisions," much less to-day and to-morrow when men's conscience returns unto them nothing will be said about it. It will be history. The incision will be as large as the case demands, and made as cautiously as the golden rule requires. The best interests of the patients are served only when speed and thoroughness go hand in hand. No time should be lost, no step that could be of possible harm should be taken. He operates best who can operate in the presence of witnesses just the same as if no witnesses were present. It is net results we desire and nothing short of this will suffice.

"The tumult and the shouting dies,
The Captains and the Kings depart,
Still stands thine ancient sacrifice
An humble and a contrite heart."

Anesthesia should be touched upon briefly. We formerly had the idea that the anesthetic did the work and anybody could give it. We have since learned that the anesthetic sometimes overdoes the work, and we are becoming a little more careful about its administration. Now we have an anesthetic whose behavior is thoroughly established, ether, with a fatality of something near 150,000 in proper hands, and another just as well established, chloroform, with a fatality of 1-3,000 to 5,000. Still we are hearing much about nitrous oxide anesthesia and see members of the surgical profession in various parts of the country unduly en-

thusiastic and trying to make a run on this specialty so to speak. Well, it isn't fair to the people who do not know. Oh no, it doesn't produce nausea, but there are worse things than nausea, sometimes. And until we know more of its apparent misbehavior in prolonged anesthesia I believe we should tell the truth about it and say that its mortality when prolonged is much higher than ether, and probably than chloroform which has been discarded by every single busy surgeon, I know, on account of its danger. There are many, yes, numerous anesthetics, but if we must put our patient to sleep let us use one that will give him the best chance to wake up.

Finally surgeons sometimes yield to the temptation to let patients up especially from major operations too soon. It does sound big to have it said that "Dr. So-and-So removed my appendix three days ago and now I am up and sound and well. He's a wonder." It would sound much better if it were true. And when such a course is permitted it's a safe bet that it isn't done for the welfare of the patient. Never. It's for the advertisement of the surgeon. It makes more hernias, more adhesions, more infections, more funerals, for reasons so patent, so self evident to every physician who knows aught of the process of repair or the complications that may arise subsequent to an operation that he could not fail to consider it absurd. The wisest remark I ever heard the brilliant late Richard Douglas make was this: "The surgeon owes nothing to statistics, nothing to scientific records, nothing to himself; but he owes it to the case in hand to give him the best possible chance to get well."

This paper has not been written with a view to criticize or offend any man or any group of men in or out of the profession. It is rather an inventory, a retrospect, and I know I am guilty of some of the condemned practices; but I am not so conceited as to think that renders them less damnable. Medicine and surgery are coming day by day to

be more nearly exact sciences, and the time has arrived that those who practice must recognize the change. The growth along correct lines depends upon the faithfulness with which we employ our knowledge, upon our honesty, integrity and truthfulness. There is no reason why we should not let our statements represent the whole truth even if we are compelled to admit we do not know; no reason why our preparatory, operative and after treatment should not be in exact accordance with our knowledge and lead definitely to the greatest good to the greatest number of those whose afflictions have led them to the surgeon for opinion or for treatment.

There are many other factors that might be discussed with advantage, but I have already written too much. have been able to stimulate a thought now and then that will save an occasional life directly or indirectly. I shall consider myself fortunate. We are drifting from, no, we are deliberately leaving much that has heretofore been held sacred in various departments of life, in education, in religion, in the foundry and factory, in the offices, in the banks, in applied science, even in purchasing commodities. And the tendency is toward efficiency, toward net results. We used to think that our religious duty was to pray and make a great noise; now we are beginning to realize it is to "visit the fatherless and widows in their afflictions and to keep ourselves unspotted from the world." We are wanting so much heating energy instead of so many tons of coal, we want a bookkeeper in the bank instead of the President's good-for-nothing son who is given the position to reform him. We are following the same tendency in medicine; we are loose from the old moorings and must look with untiring search for everything that will increase our efficiency and reduce the margin of danger to its lowest minimum.

# CLINICAL EXPERIENCES WITH COAGULOSE IN CASES OF HEMORRHAGE

BY C. W. RAIN, M.D., OF KNOXVILLE, TENN.

Persistent hemorrhage is known to be due to a number of conditions, the most important of which is diminished or retarded coagulation of the blood. The natural coagulation of the blood is brought about by a fibrin ferment, which, in cases of persistent hemorrhage, is believed to be produced in insufficient quantities. We are all aware of the fact that the application of a foreign blood, such as might be obtained from an animal or another human being, when applied to an oozing surface frequently causes a more or less prompt cessation of the bleeding. It is therefore a rational procedure to obtain a serum or a preparation from normal blood that will contain sufficient ferment. Such a preparation is Coagulose. This product is a sterile, soluble, anhydrous powder, and contains the fibrin ferment necessary to cause clotting of the blood. It is obtained from normal blood serum and is readily soluble in cold water at concentrations two or three times that of the original serum. It retains its efficiency unimpaired for a great length of time, as 0.65 grams of desiccated powder, equivalent to 10 Cc. of the blood serum when mixed with 6 to 8 Cc. sterile water, is supplied in 15 Cc. glass bulbs. My experience with Coagulose is not confined to cases in which a deficient fibrin ferment was believed to be at fault, but also cases in which an open ulcer was the cause of the hemorrhage, such as the bleeding in typhoid fever.

CASE 1.. Mrs. X. Age, 50. Housewife.

Family History—Negative.

Present trouble (severe epistaxis) began about six months ago; a continuous oozing for the past three months. Had been treated by specialist during this time, he stating that he could find no cause for hemorrhage. Relief was only temporary, and after three office consultations, case was re-

ferred to me. Physical examination proved negative, except for secondary anemia due to loss of blood. Blood pressure and urine negative. This hemorrhage could not be accounted for in any other way than that her blood lacked in coagulating elements.

Treatment—One dose of Coagulose administered each day for four days. An appreciable change was seen after the first dose and before the administration of the second dose, the day following, as oozing was diminished in amount, judging from the number of soiled handkerchiefs, as well as color of same. Each day showed improvement, and on the day of the fourth administration, was pleased to learn that the hemorrhage had entirely ceased late in the evening. Each dose was administered early in the morning. Four doses in all were administered. This was the first occasion of my having used Coagulose, and as I am always conservative in the use of drugs, I cannot but conclude that the above result is most gratifying.

Note—It is now over a year from the time this case was treated, and there has not been a return of the above symptom. Patient is well and hearty.

CASE 2. Mr. John X. Age, 18. (Son of Mrs. X.)

Family History—Negative except mother had severe epistaxis about eight months ago.

Present Trouble—Moderately severe epistaxis of about two weeks' standing. All methods of local treatment to nasal mucous membrane had failed, at least in part. On account of the happy result obtained by his mother, he came to consult me about his nose bleeding.

He was given two doses of Coagulose on successive days. The bleeding ceased after the first dose.

This case proves interesting because of age of patient and because of mother's history. Neither had ever had nose bleed except the one time. A clear history of hemophilia could not be obtained in the boy. It is interesting to note

that these two cases of hemorrhage occurred about the same time, only eight months intervening. It is also interesting to note that ordinary styptics failed, the blood would not coagulate.

The happy result in these two cases certainly speaks well for Coagulose. I do not see how any other conclusion but the above could be arrived at. This boy's physical examination was negative throughout.

I asked the patient to inform me if he ever had any bleeding from any membranes again, as I wished to follow up this case. So far such has not been reported, a period of almost seven months.

CASE 3. Mr. Y. Age, 20; male. Civil state, single. Occupation, clerk.

Family History—Usual diseases of childhood, otherwise negative. Present trouble began about one week ago, with headache, temperature 101, pulse 84. No other symptoms noted at this time. Temperature was watched daily. With morning remissions, temperature gradually reached the height of 105 at the end of one week. At this time Widal proved positive. Temperature remained 105 three days, then became 103 4-5. Patient did well considering severe typhoid toxemia until about the second or third day of the third week, when he suddenly began having hemorrhages. fifteen in all, within three days. Case was despaired of, and though he reacted after each hemorrhage, we were at a severe loss to state what would be the outcome. Naturally our prognosis was very grave. Blood pressure had not been taken throughout this case nor at the time of any of the above hemorrhages. At the time the first dose was administered, the pulse was very rapid and thready, and could not be successfully counted. The patient was extremely restless, the entire surface of the body was bathed with cold sweat. Profound anemia was marked, though no blood was taken for hemoglobin estimation. Lips, mucous membrane, and ears were profoundly cyanotic. Six doses of coagulose were given within two days, four the first day, and two the second. No other treatment except elevation of the foot of the bed, ice bag as usual to the abdomen, and saline infusion, under the breasts. There was no other evidence of active hemorrhage, so far as we could ascertain. The blood pressure was taken the following morning, and much to my surprise, was found to be 80. The patient had reacted, the temperature had become lower than at any time before, registering 102, pulse 136, respiration 24. The blood pressure a week later was 110. Patient recovered.

This case was seen with me by various consultants, and we all felt it was hopeless. However, to set at rest the minds of the parents, Coagulose was suggested, and was administered as above stated.

The first two hemorrmages of this group were unusually severe. The other was probably less so as symptoms were not so severe, or as marked as after the first two hemorrhages.

We were happy to note, from whatever cause, the hemorrhages ceased. We certainly attribute it to Coagulose, and we believe the patient owes his recovery to that preparation.

### Reviews and Book Notices

AMERICAN MATERIA MEDICA, THERAPEUTICS AND PHARMACOGNOSY. By Finley Ellingwood, M.D. Published by Ellingwood's Therapeutist, 32 N. State St., Chicago.

When the Civil War shut off the South from its supply of drugs, its physicians were forced to rely on the native products of the section for the means of combating disease. The bars were lifted with the close of the conflict, and we went back promptly to our old remedies, which had then all the attraction of novelty. Besides, we had been brought up on them, our early studies had been upon them, our textbooks spoke only of them, and we did not then realize the value of what we were giving up.

Conditions are paralleled now, as the European war has shut off our supplies of most of the drugs and chemicals to which we had been accustomed. It certainly seems a happy thought that Ellingwood should take this time to present his new edition of a really American materia medica. In it we find the native drugs that afforded us such resources when we needed them most: but those have been studied and vastly improved. Their applications have been carefully laid down, and their pharmaceutic forms are altogether different from the decoctions of dogwood and jessamine we once used. Our native plants are presented to us as alkaloids, glucosides, specific tinctures, etc., prepared with the finest pharmaceutic skill the world has yet attained, and as pleasant to the palate as the purest of German chemicals. It is sufficient to say that the pharmacy and pharmacognosy of this work are by John Uri Lloyd.

The indications for application are given with a precision not to be excelled by any of the other text-books. Many active clinicians have collaborated with Prof. Ellingwood in fixing the place of these remedies, and one may apply veratum or rhus, bryonia or gelsemium, with as clear guidance as chloral or quinine. Those who are familiar only with European texts and imported drugs may peruse this work with advantage, finding through it a wealth of new remedies, which, if the profession takes this opportunity to try out, will not again give way to the eastern products. Not that Ellingwood confines himself to the native drug plants by any means. The hormones and other animal products, the non-drug methods, are all well considered here.

TEXT-BOOK OF MATERIA MEDICA FOR NURSES. Compiled by Lavinia L. Dock, Graduate of Bellevue Training School for Nurses. 8 vo., cloth, 5th edition, revised and enlarged. G. P. Putnam's Sons, New York and London, Publishers. Price, \$1.50. 1915.

A most excellent and well written work, that will prove valuable for the purposes for which it is intended, and will be recognized as indispensable to those engaged in nursing.

The fourth edition was entrusted to Miss Bean of the Johns Hopkins Training School for Nurses, and this last (fifth) edition to Miss Ethel Johns of the same school. As in former editions the sources have been personal rather than from books, not taken from other works on Materia Medica but collected in the pharmacy, the class-room and the clinic, preserving the practical character essential in teaching nurses.

Whenever necessary, the changes in the last—Eighth Decennial—edition of the U. S. Pharmacopoeia have been followed. A liberal list of new drugs and new preparations, and much recent material on alcohol, salts and other substances have been incorporated, together with information on serum, and organo-therapy, the hypodermatic administration of drugs, emetics, treatment of poisoning, etc., and an exhaustive index.

THE PRACTITIONER'S VISITING LIST FOR 1916. Four styles: weekly, monthly, perpetual, sixty-patient. Pocket size; substantially bound in leather with flap, pocket, etc.; \$1.25, net. Lea & Febiger, Publishers, Philadelphia and New York.

The Practitioners' Visiting List embodies the result of long and studious effort devoted to its development and perfection, and is the final result of over thirty years' experience in meeting and anticipating the needs of the practicing physician. It is a practical convenience which, once possessed, becomes indispensable to the busy practitioner.

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THE HOLY BIBLE, SCHOLARS' EDITION. Illustrated, 16 mo., ruby type, embossed morocco, gilt edge, containing the Old and New Testaments. Translated out of the original tongues; and with the former translations diligently compared and revised. Printed and bound at the "International Press," The John C. Winston Co., Manufacturers of Books and Bibles, Winston Building, 1006-1016 Arch St., Philadelphia.

We have never been so presumptuous as to attempt to amend the Decalogue or criticise the Lord's Prayer, and in acknowledging receipt of this beautiful copy of the "Book of Books," shall only mention the splendid mechanical execution shown in the clear "ruby" type, good paper and magnificent binding, making it truly a work of art. It will make a most appropriate, appreciable and excellent "Christmas Gift" for your sweetheart, wife, son, or daughter. You can procure a copy by communicating with Mr. Robt. Halley, at "The Old Book Shop," 162 Fourth Ave., N., Nashville, Tenn.

# Editorial.

#### RETROSPECTIVE.

In closing our work for the Thirty-Seventh Volume of The Southern Practitioner we desire to tender our heartfelt and most sincere thanks to our many readers for their kindness and aid during all these years, fully appreciating their loyal and generous support by their contributions, both financial and literary, which have enabled us to keep our humble journalistic protege fully at the front. In its pages during the more than a third of a century in which it has regularly made its monthly appearance, will be found recorded, somewhat briefly at times perhaps, but as fully as our space would permit and circumstances required, the truly marvelous and wonderful advances and progress along both surgical and medical lines, together with the development in special fields that we deemed of sufficient importance and value to the general practitioner of medicine and surgery.

Recognizing the brilliancy, the glamour, the eclat attending the striking and multiform successes accomplished by the wielders of the glittering scalpel, rendered possible by anesthesia and asepsis, equal if not greater achievements have been attained by the internists.

Although operations of the important vital viscera contained in the abdominal, thoracic and cranial cavities, including likewise the vertebral, have given glory and renown to the victorious skill of the adept and trained surgeon, yet these very achievements have attracted far too many half-baked, would-be surgeons, too much green wood, encouraged and invited too many neophytes, crude and inexperienced to enter that domain that should be relegated solely to the tall timber, the fully developed, well skilled and experienced surgical hand; thereby diminishing to no little extent the percentage of successful results, and adding to the mortality rate of these wonderful advances, this marvelous progress.

On the other hand, let us take but a cursory glance at some of the accomplishments, the attainments and the successes of the internists. We now know, for instance, that malaria and yellow fever, once so destructive and disastrous in our own bonnie Southland, but now disarmed of their former terrors, are caused respectively by the plasmodium malariae and the bacillus icteroides, one absolute essential to their life cycle being the anopheles and the stegomya mosquito. We prevent the infection of mankind by removing their habitat by proper drainage, or covering aquatic areas with oil; or in the event these measures are infeasible, by the use of screens we keep the mosquito from visiting either sick or well.

Similarly we know that the deadly typhoid is produced by the bacillus typhosus introduced into the animal economy of man with food and drink; we therefore place strict watch and ward over these life-essentials, adding to our lines of defense the demonstrated and absolutely effectual antitoxin. Just think of it! Of one hundred and twenty thousand men in the "Yankee-Don" war six per cent or twenty thousand cases developed, with a mortality of seven per cent—and ninety per cent of these cases showing up within eight weeks after mobilization; while more recently a full army division was mobilized and kept in camp in Texas for two months, and by reason of the proper and now known measures being resorted to, only one case developed, and that in the person of an unvaccinated teamster.

Another most important fact, than which nothing has been more definitely established or clearly demonstrated, is that diphtheria antitoxin as perfected by Roux and Behring, is not only a prophylactic but a curative agent by which the former alarming and terrible mortality of this murderer of the innocents has been so marvelously reduced.

Even the "great white plague" has had its almost inevitable mortality materially lowered by prophylactic and curative measures in the quite recent past; Asiatic cholera that has had its human hecatombs in our own fair city in days of yore, has been here unknown since

our first volume was issued; and to the bacillus pestis, transmitted to the villainous rat and by him to the wicked flea—sole etiological factor in producing the "Black Death" or Bubonic Plague, in yet more recent days, effecting an entrance into two of our great metropoli, San Francisco and New Orleans, with their teeming thousands of a most heterogenous population, the edict has gone forth—"Thus far and no farther."

Furthermore, although fortunately "therapeutic nihilism" has not been accepted by the practical and efficient internist, yet by careful clinical observation and recorded facts, we have attained a more judicious administration of drugs, multipharmacy has been abandoned although empiricism to some extent yet holds a place, many useless, inert or harmful articles have been discarded and new ones, including serum therapy, introduced, we less frequently lose the child, and even the mother, and more often save the "old man."

And yet again, as to the important and Divine gift of vision, "the eyes being bread winners," the obstetrician in his dual capacity of surgeon and internist, by proper and established methods of handling the newly-born, has been more successful numerically in the prevention of blindness in connection with ophthalmia neonatorum than has the specialist in the treatment of trachoma.

However, we will not go farther with this cursory retrospect, nor would we take a single leaf from the laurel wreath, or detract in the least iota from the truly brilliant record won in the field of Modern Surgery, yet with this limited enumeration of facts to be found recorded in the pages of our thirty-seven volumes, as "time put his sickle in among the days," we think we can justly claim a larger wreath, more successful results, a greater prolongation of human life and a more diminished mortality rate accomplished by the internist. Admitting the greater attractiveness and larger emoluments of Surgery, due largely to individually the more apparent successes, we can, with all due respect, say, that "all is not gold that glitters," and the humble honey bee, in his modest garb, going from flower to cell, does more for humanity than the more gaudy, blatant and noisy bumble-bee—both have their uses and do their work well in their respective fields.

In conclusion, we submit the following extract from an address by Henry Keller, M.D., read before "The Physicians' Protective League of New York," and published in the Medical Economist of Nov. 15th, ult., entitled "The Necessity of Co-operative Work Among Physicians."

"By the term co-operative work among physicians, I mean to imply the association of a number of physicians for mutual profit, from an economic and scientific point of view.

"The most powerful co-operative force in the industrial system

is what economists have termed "the division of labor," meaning in reality, the graduation of labor towards productive ends. In medicine "division of labor" manifests itself in the development of the various "Division of labor" applied to production means that different kinds of labor be distributed to different individuals and classes so that all shall do that for which they are best fitted. through circumstances, capacities, tastes, etc. In a more technical sense, however, it applies to labor employed on particular products. In order to economize labor it is necessary to assign each part to one man or a set of men, best trained in that particular work. Such arrangement results (a) in shortening the period requisite for one to become an expert workman, and (b) brings into most profitable service all diversities of talent and capacity. In medicine the same rule holds good. The methods of diagnosis and modes of treatment in some branches have become very complicated, requiring special training, skill and prolonged preparation, and since there is a limit to human energy and mental capacity, division of labor in the nature of specialization is the only solution.

"The physician who has devoted a number of years to a particular branch of medicine or surgery develops a certain dexterity in the handling of his instruments and thereby attains better results than one whose training in that line is deficient. His proficiency in one particular field, however, is always gained at the expense of his general and broad medical outlook. The specialist's medical vision gradually narrows, and sooner or later he becomes helpless without the aid of the general practitioner. The gynecologist will account for a headache by the discovery of a slight prolapse of the uterus; the gastro enterologist will ascribe it to intestinal stasis; the ophthalmologist to errors of refraction, etc., etc. (And we may add the surgeon—and floating kidney, or other pathological conditions in his line.—Ed. S. P.)

"Every one of them will have developed a tendency to magnify out of all proportion the part played in the causation of disease, by the organ in which the specialist happens to be most interested.

"The general practitioner is the only man suited by temperament, training and broader outlook, to decide which of the causes mentioned above is the greatest offender, and the relative part played by each, and in that way often saving his patient from some unnecessary mutilations."

#### ASSOCIATION OF AMERICAN MEDICAL EDITORS.

The forty-seventh annual meeting of this Association, held at the Hotel McAlpin, in New York City, Monday and Tuesday, October 18th and 19th, ult., concluding with a banquet on the evening of Tuesday, was most enjoyable. Dr. H. Edwin Lewis, editor of American Medicine and President of the Association, in his address to the several hundred physicians and medical editors present, said: "The medical men of the United States do not realize their power in the body politic or the body social; in other words, they are oblivious to the force they are in their communities and the influence they could, and should, wield in the solution of countless problems of the utmost importance to the people." He added, that the solid, substantial medical publications of the country have opportunities such as they have never known before, and that if they arise to the situation and prove true to the trust imposed in them there is no limit to the service they can give to the American practitioner of medicine and through him to all humanity.

During the progress of the meeting, the following was adopted:

Whereas, The American Medical Editors' Association believes the principle of the freedom of the press bears unusual force in relation to the medical press, discussing subjects germane to medical progress, and

Whereas, The Southern California Practitioner has been indicted by the United States Postal Department because of the publication of an article dealing with the "sex question" which appeared in the issue of March, 1914.

Be It Resolved, That the American Medical Editors' Association express to Dr. George E. Malsbary, Editor of the Southern California Practitioner, its confidence and moral support in the pending action.

Be It Resolved, That the American Medical Editors' Association assure Dr. Malsbary of its willingness and readiness to afford him any assistance and support within its power according to the Constitution and By-Laws.

The officers elected for the ensuing year are: Dr. E. C. Register, Editor of the *Charlotte Medical Journal*, President; Drs. W. A. Jones, of Minneapolis, and G. M. Piersol, of Philadelphia, Vice-Presidents; and Dr. J. McDonald, Jr., editor of the *American Journal of Surgery*, Secretary and Treasurer.

# ENTERTAINMENT OF DELEGATES TO THE SOUTHERN MEDICAL ASSOCIATION.

On Friday, November 5th, a number of physicians from Kentucky, Georgia, parts of Tennessee, and other sections of the South, spent the day in Nashville, en route to Dallas, Texas, to attend the meeting of The Southern Medical Association, and were entertained at Clinics held at St. Thomas' Hospital, and the Vanderbilt Infirmary, by Drs. W. D. Haggard, Hilliard Wood, Richard Barr, and Lucius E. Burch.

together with an old-fashioned "barbecue" of which Dr. Duncan Eve was the host. This most enjoyable occasion was at the Hermitage, and served two purposes, the bringing together in a social way the visiting delegates, the members of the faculty of the Medical Department of Vanderbilt University, and a few especial friends of the host among the local medical profession, and extending an opportunity to the visitors to inspect this historic homestead. The guests, who included sixty or more friends of the host, were received by a delegation of the Ladies' Hermitage Association, who included Mrs. B. F. Wilson, regent; Mrs. A. M. Shook, Mrs. P. H. Manlove, Mrs. Betty M. Donelson, Mrs. R. A. Henry, Miss Carrie Sims and Mrs. Ed. A. Price and Mrs. J. H. Campbell. Mrs. Manlove was chairman of the barbecue committee, and all details had been successfulyl arranged.

The tables under the trees of the rear lawn of the home were very attractive in their rustic beauty, ornamented with pumpkin baskets that were surrounded by leaves and autumn fruit. Quite an interesting feature was the splendid address made by Dr. J. A. Witherspoon, on the life and character of "Old Hickory," who was introduced in a characteristically happy vein by Dr. Eve.

#### "REST COTTAGE" AT THE CINCINNATI SANITARIUM.

We regret that we were unable to be present at the "opening" of this handsome and important addition to the Cincinnati Sanitarium, which occurred November 18th and 19th, ult. While in Cincinnati in July, last, we had the pleasure of seeing this handsome and appropriate addition to the Cincinnati Sanitarium then in process of construction; and noticed that it was in every way fully in keeping with the other beautiful structures and grounds of this most excellent and successful Sanitarium for Nervous and Mental Diseases and Drug Addictions, which still maintains its well-earned reputation of a low mortality rate and high percentage of recoveries. The location and surroundings are ideal. During the summer months the lawn with its spaces of sunshine and the shade of magnificent forest trees are utilized as fully as possible. In inclement weather a supply of plants and flowers from the green-house add to the indoor attractions, while the sun-parlors offer space for recreation.

#### INFANT BLINDNESS.

The educational campaign conducted by the State Board of Health and the Nashville Council of Jewish Women for the prevention of infant blindness should have every possible encouragement from everybody interested in human welfare. Infant opthalmia is the physical manifestation of the "sins of the fathers visited upon the children even to the third and fourth generation," one of the Biblical state-

ments that has always seemed to so many people unjust. Fortunately, it has been found to be readily amenable to treatment at birth, and the injustice, instead of resting longer on natural law or superhuman edict now rests squarely upon society. For every child that henceforth goes blind through this transmitted taint, someone is to blame and society must bear the condemnation of an unjustice done through a hampered life.

#### EXPELLED FOR FEE SPLITTING.

We learn through its Journal that the first trial of a member of the Missouri State Medical Association on a charge of fee-splitting and offering to split fees was held recently by one of its component societies. The offender was found guilty by the board of censors and expulsion recommended. The report of the censors was adopted by the society and the sentence carried out. The expelled member was also a Fellow of the American Medical Association, which affiliation he loses.

The trial and expulsion of the guilty member is a warning to others that an awakened profession will purge itself of members who defy the traditions, discredit and lower the tone of the profession.

Whooping-Cough a Serious Disease:—In an address before the New York Academy of Medicine, and reported in the Archives of Pediatrics, issue of August, 1914, John Lovett Morse, A.M., M.D., Professor of Pediatrics in the Harvard Medical School, made this significant statement: "The relative mortality from whooping-cough, scarlet fever and diphtheria is essentially the same throughout the country, whooping-cough being almost everywhere more fatal than scarlet fever and less fatal than diphtheria. . . . Instead of being a trifling affair, as it is usually considered to be by the laity, whooping-cough is a most serious and fatal disease. 'Any disease which kills 10,000 children per annum is,' as Rucker says, 'a serious one. If bubonic plague were to kill that many children in the United States in one year, the whole world would quarantine against our country. A child dead of whooping-cough is just as dead as a child dead of plague.'"

In the same issue of the journal above referred to, the editor, an undoubted authority, says that "whooping-cough causes more deaths in children under one year than any other infectious disease."

In view of these startling facts, is it not just possible that the profession at large, like the average layman, has been too prone to look upon whooping-cough as an inevitable concomitant of childhood, and to underestimate its seriousness?

The Bordet-Gengou bacillus is recognized as the specific cause of

whooping-cough, and the most rational method of treating the disease is by means of vaccine prepared from cultures of this bacillus. It is pertinent in this connection to refer to two such vaccines which are manufactured and marketed by Parke, Davis & Co. One bears the name of Pertussis Vaccine; the other is designated as Pertussis Vaccine. Combined. The first-mentioned vaccine is indicated in cases diagnosed as pertussis, in suspected cases when a definite diagnosis is lacking, and as a prophylactic. The second is indicated in all cases of pertussis, but especially those which have persisted for some time, such infections being usually of a mixed type. The vaccines are administered hypodermically and are supplied in bulbs, in rubber-capped vials, and in glass syringes. The various packages are fully described in an announcement which appears elsewhere in this journal under the caption, "The Vaccine Treatment of Whooping-Cough." The advantages of the vaccine treatment are succinctly stated in the advertisement, which our readers are advised to consult.

THE TRI-STATE MEDICAL ASSOCIATION OF THE CAROLINAS AND VIRGINIA: We desire to acknowledge the receipt of The Transactions of the seventeenth annual session of this live and progressive organization, containing some thirty excellent papers and the discussion thereon, the minutes of the meeting, and the usual matter included in such publications, together with the Annual Address of the President, Dr. E. C. Register, of Charlotte, N. C., the very able editor of The Charlotte Medical Journal. It is handsomely printed, well bound in cloth, comprising 436 octavo pages, the frontispiece being a splendid portrait of the President. Want of space prevents a more extended review, but we can say conscientiously that it compares most favorably with any volume of Transactions that have preceded it. However, we cannot refrain from making the following brief extract from the conclusion of the most excellent and interesting address of the President, his subject being "The Advantages of Medical Associations."

Referring to Medical Journals, he says: "In general, it may be said that the advantageous functions of the medical journal are two: distribution of medical knowledge, and a permanent archive of medical evolution. As a means of distribution of medical discoveries and advancement, the medical journal cannot be overestimated. By their combined interlacing and interlocking with associations, the distribution of medical knowledge is greatly enlarged.

"The second vital function of the medical journal is the preservation, as a record, of medical advancement. All literature has this function. In point of fact, we might define literature as the process by which the thought of all men is preserved for the use of each man; the thought of all generations preserved for the use of each generation. It is by the process of literature that one is able to know and associate with the great souls of all time. . . . . So, in our medical records, we may learn at the feet of the great seers of our science, and preserve the light with which they illumined the night of man's suffering, until all shadows shall flee at last before the oncoming morning of man's full physical emancipation."

· SANDER'S EUCALYPTOL is characterized by Mr. De Bavay, the eminent analytical chemist of Melbourne, as comparing with the commercial eucalyptus products as well refined and matured brandy compares with raw spirit. Not only does the primary distillation from the selected leaves of the best species give it a unique position, but the fact of it containing a large amount of eudesmol-peroxide imparts to it a superior antiseptic efficiency and freedom from irritant effects. It has great antipruritic power, and wherever there is inflamed skin which causes intoleable itching, as in pruritus ani or vulvae, eczema, simple and contagious impetigo, etc., the following will be of great service: R. Acidi Carbolici, 15 grs.; Sander's Eucalyptol, 30m; Ung. Zinci Oxidi 1 oz. As soon as the state of the skin permits painting with the pure Sander Eucalyptol will cause rapid improvement especially in all chronic skin affections. In the troublesome facial eczema of infants from 20 to 60m of Sander's Eucalyptol should be added to the ounce of boracic ointment and applied. Astonishing results have also followed the application of the pure Sander Eucalyptol to inflamed gums and intractable ulcers.

There are now on the market a number of crude oils of eucalyptus which contain the woody resinous extracts of the various species from which they are distilled and which lack the most preliminary refinement. They are generally bought from the crude distillers by trading concerns who are ignorant of what they contain, and are frequently pushed under coined names. It is therefore essential to specify Sander's Eucalyptol if the physician desires to safeguard his reputation and to benefit his patient.

THE TREATMENT OF DYSMENORRHEA:—As the general practitioner knows only too well, dysmenorrhea is productive of much pain and misery. Especially does it often severely handicap the working woman, since if not relieved by a safe and effective remedy, it renders her temporarily either unfit for her daily vocation, or compels her to fulfil her task under circumstances which essentially lower her efficiency. Naturally many women when suffering from this distressful condition have recourse to opium or some of its numerous preparations, which to use an old adage, is, for the one afflicted, like "jumping from

the frying pan into the fire." True, the pain will be relieved, but there is always the liability of establishing a habit, in addition to the other evils to be feared from the employment of opium or its derivatives. Fortunately it is rare that such drugs need to be used, except in the most exceptional cases, for in Phenalgin the profession have an excellent substitute, a remedy that exerts a thoroughly dependable anodyne or analgesic effect, without exercising at the same time any depressing or injurious action. Stated in brief, Phenalgin can be relied upon to control the severe pain of dysmenorrhea in all but the rarest cases, without the dangers or sequelae of other pain-relieving measures.

TONGALINE:—A Brooklyn physician reports: "Had suffered from headache for a whole week and had taken large doses of antipyrin, phenacetin and aspirin with no results. After taking 20 Tongaline & Lithia Tablets, my headache is wholly gone."

A Chicago physician reports: "Some time since a young lady patient of mine learning that her mother, who lives in New York, was very ill from neuralgia and general prostration, that the case was considered alarming, as no relief could be obtained except from the use of narcotics, asked my advice and I told her that while I was not at liberty to interfere, if her doctor was willing, she should try Tongaline. I have just learned that the mother did so and is now so much improved as to be able to go to the Adirondack Mountains to recuperate."

A Pennsylvania physician reports: "For a patient with a swelling of the knee, rheumatic in character and an exaggerated flexion which had existed for five months, I prescribed Tongaline with marked improvement."

DANGER DUE TO SUBSTITUTION:—Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol. The more recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proven injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit. This fraud, which was exposed at an action tried before the Supreme Court of Victoria, at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribes. No "Just as Good" allowed.

FOR THE PROTECTION OF THE PATIENT:—In this day of sophistication and substitution the earnest physician cannot be too careful in following up his prescriptions to see that his patients are given exactly what he wants them to have—and nothing else. Especially is this so in regard to remedies of exceptional quality, such as Gray's Glycerine Tonic Comp. Numerous imitations of this reliable tonic are constantly being foisted on the unsuspecting, and when as a consequence of the patient failing to get the original "Gray's," the expected results do not materialize, the doctor's skill and ability are apt to be questioned. For the protection of his patient and in justice to himself, the physician should invariably write for "Gray's" as follows:

R. Gray's Glycerine Tonic Comp. (Purdue Frederick Co.) One bottle—16 oz.

By thus specifying an original package, the painstaking physician will safeguard his patients and insure his results.

THE "CITY" ANEMIC:—The hard hum-drum city life, especially of those whose days are spent indoors, in offices, bending over desks, ledgers, and school books, is almost certain, sooner or later, to leave its traces upon the man, woman or child thus unfortunately situated. General sluggishness of metabolism, due to indoor confinement in a devitalized atmosphere, and lack of exercise, is followed by failing appetite and later by degenerative blood changes of anemic nature. While Pepto-Mangan (Gude) cannot, of course, remedy the cause of the anemia and general devitalization, it almost always assists materially in overcoming the anemic blood state, increases appetite and acts as a real tonic and general reconstructive. As Pepto-Mangan (Gude) is free from irritant effects upon digestion, it is readily borne and quickly absorbed and assimilated, and as it is non-astringent it does not cause or increase constipation.

THE BOWELS ARE SECRETORY ORGANS:—It is the failure of the secretory function of the bowel, together with a poor bile secretion, which, in nine cases out of ten, is responsible for constipation.

Most cathartics altogether overlook this factor and address themselves solely to a stimulation of the musculature. Some even inhibit intestinal secretion. The result is a rapid, unsatisfactory bowel movement, followed by paralytic reaction.

Pil. Cascara Comp. Robins is a rational therapeutic formula, which promotes a natural flow of secretions, which is, in turn, the physiologic stimulant of peristalsis. Thus a normal evacuation is produced, without subsequent inhibition. A trial will give you satisfactory results.

AN EPITOMIZED DIAGNOSIS OF GASTRO-INTESTINAL DISEASES is the title of an excellent little booklet of some sixty pages that is being sent to physicians by Messrs. Reed & Carnrick, 42-44-46 Germania Ave., Jersey City, N. J. While it is compact and brief, it is in every way fully up-to-date, and contains a mass of valuable matter exceedingly well arranged that will prove of value to both the specialist and general practitioner. It contains a number of beautiful half-tone, colored plates, showing the appearance under pathological conditions of various portions of the gastro-intestinal tract and its appendages. If you have not received a copy write to them at once.

A SAFE AND EFFECTIVE SOMNIFACIENT:—A soporific agent of particular therapeutic worth and one especially indicated in women and children by reason of its freedom from danger and disagreeable aftereffects is *Pasadyne* (Daniel).

Pasadyne is a concentrated tincture of passiflora incarnata and has been prepared by the same firm for more than thirty-five years. This preparation will be found of reliable worth in all nervous states. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., 34 Wall St., Atlanta, Georgia.

FACTS PROVE STRONGER THAN FANCIES" and in the treatment of Dysmenorrhea, Menorrhagia, Neuralgia, etc., the administration of Hayden's Viburnum Compound has time and again proven a dependable and reliable anti-spasmodic and analgesic. Its therapeutic action and reliability have been attested by acknowledged authorities in gynecological work. "The Reason Why Results Follow" is a brochure presenting incontrovertible evidence of its efficiency. Send to The N. Y. Pharmaceutical Co., Bedford Springs, Bedford, Mass., for a copy.

PNEUMOSEPTIN is a new candidate for professional favor, manufactured by the Gowan Medical Co., of Concord, N. C., for external use in the relief of Acute Congestion and Inflammation; and applicable in cases of pneumonia, pleurisy, whooping-cough, orchitis, etc. A number of "Clinical Reports" from Cook County Infirmary, Chicago, were sent us, showing remarkable results in cases of Pneumonia, Pleurisy, and Bronchial Inflammations, etc.

GLYCO-HEROIN (Smith) will be found most excellent in coughs, colds, and bronchial irritation. It is an absolutely stable and uniform product that has gained world-wide distinction through its dependable therapeutic effects. Give it a trial, if you have not done so, during the coming season of coughs and colds.

# Selections

QUININE AFTER OPERATION: -E. Bonnot and A. H. Cleveland in the Journal of the American Medical Association. August 7, 1915, describe a modification of a method of administering quinine salts, a preliminary report of which was given in The Journal, January 9, 1915. "Quinine muriate. 10 grains, dissolved in two ounces of water at 100 F.. is given by rectum immediately after operation, followed by saline proctoclysis or (in septic cases) by six ounces of olive oil. The quinine is repeated every six hours for from four to six doses. In large or stout individuals, the first two doses are given four hours apart. In case the saline proctocylsis is used, it should follow the quinine in about thirty minutes for best results." The postoperative backache has been practically eliminated and only about 2 per cent suffer any gas pain to speak of, and if so one enema relieves. The postoperative nausea and vomiting are less frequent and reduced in duration, though vomit-Frequently a single stomach wash ends all nausea and vomiting permanently. Postoperative thirst is delayed, and is absent in 60 per cent. The patient usually has a free bowel reaction within twenty-four hours when morphin has not been given. The treatment is of special advantage when there is very much trauma, and did not interfere with pregnancy in a pregnant woman. been used in only two cases following chloroform. did nicely, but in the other it had to be discontinued as cyanosis appeared. When it is used after choloroform, the authors advise waiting until the patient has regained consciousness. Patients feel comfortable after operation, and morphin is seldom if ever required. Sodium bromid, 20 grains, was associated with each dose of quinine in fifteen laparotomies with good results, and seemed to reduce the nausea and vomiting. The beneficial action of the bromid

so administered was especially marked in eight goiter cases. The only complications observed were cinchonism in three cases, and one case of drug eruption lasting three days; but the patient did not suffer at all.

TREATMENT OF MALIGNANT TUMOR GROWTHS BY RA-DIUM:—The closer the radium to the object the greater the effect of the rays. As the rays shoot out in every direction from the center the ideal course of treatment would be to have the radium as nearly as possible in the middle of the tumor. Therefore a malignant growth in one of the normal tubes of the body and within reach of radium application—as for instance, in the esophagus, or the rectum is theoretically much more susceptible to treatment, especially if the malignant growth surrounds the canal, than where the neoplasm can be radiated from one surface only. If there is a sinus running to or through the tumor, or if it is in a location where it can be pierced to accommodate the insertion of the radium, satisfactory treatment can also be carried on. When neither of these methods is possible. we have to resort to what is called cross-raying or crossfiring. In this means of treatment we divide the radium into capsules and place it on the opposite sides of the growth, protecting the skin from the burning rays as much as possible by means of screens of different thickness. All these details are matters of technic and depend upon the individual patient and the disease as well as upon the experience of the operator and upon his personal equation.— Joseph Bissell in Radium.

THE CURE OF VESICO-VAGINAL FISTULAS—Until the genius of Marion Sims rescued them from incurability women afflicted with a communication between bladder and vagina were hopeless as well as miserable creatures. Modern technique has much changed and improved the early rather cumbersome methods; and complicated special instruments and special suture materials have been discarded.

The successful treatment of vesico-vaginal fistula is based upon two cardinal principles: the utilization of all available material without the sacrifice of any healthy tissues, and the avoidance of all tension. If these two principles are adhered to special methods of suture, special suture materials, flaps, drainage, posture, etc., are of no importance. If tissues are not sacrificed, secondary operations after unsuccessful attempts are still feasible, and the difficulty of secondary operations is greater only in proportion to the increase of scar tissue.

Although the contrary opinion obtains, the bladder, much as every other hollow viscus, has a marked capacity for spontaneous repair, as is shown by the prompt closure of operative vesico-vaginal fistulæ made for drainage in cases of intractable cystitis.

To cure a hole in the bladder it is absolutely essential to freshen its edges, most readily done by separating the vaginal mucosa from the bladder itself. If this mobilization, which may necessitate extensive dissection, removal of the uterus, or reopening of the peritoneal cavity if the fistula is due to operative injury (radical hysterectomy, etc.), is successfully completed, a simple closure of the bladder wound is sufficient; in fact, with complete absence of tension and full mobility of the bladder suturing is not essential, because the displacement and retraction is sufficient, in most instances, to permit of healing if the urine is drained off by means of a retention catheter for a few days.

—R. T. F., in Am. Journal of Surgery.

OPERATIVE TREATMENT OF FRACTURES OF THE FEMUR:—
I find that personally I am to-day operating more frequently upon fractures of the shaft of the femur, than I did formerly. I am finding that fractures in the upper third, in the middle, and in the lower third of the shaft, particularly in an adult, if the line of fracture is transverse or slightly oblique, recover with better knee and ankle joints if the

long traction, made necessary by the non-operative treatment, is avoided. The restoration of the femoral shaft to its normal alignment, and the securing of the too often forgotten normal anterior curve of the femur, place the individual upon a better basis and the functional return to normal is hastened thereby.—Charles L. Scudder, in The Ohio State Medical Journal.

FUNCTIONAL DISEASES OF THE ARTERIES:—Lauder Brunton (Lancet, No. IV, Vol. II, 1915), suggests under treatment of migraine the removal of foci of irritation in eye, ear, nose or tooth. During, best at the beginning of the attack, are phenacetin or antipyrin. Sodium salicylate or potassium bromide, gr. 10 to 20, frequently relieve a headache and may prevent an attack if given when premonitory symptoms occur.

For flushings at the menopause bromides, pulsatilla and ovarian extract have all given results.

For peripheral spasm of the vessels, as in Raynaud's disease and chillblains, sodium salicylate with or without a bromide has proven best. Thyroid gland is useful in these conditions.

In cases of angina pectoris, a quiet life, abstinence from "butcher meat," nitrate, iodine or potassium iodide, good elimination, and high frequency electricity are all recommended.—Drake, in St. Paul Medical Journal.

TURPENTINE AS A HEMOSTATIC:—G. G. Turner notes that the principal sphere of turpentine as a hemostatic is in cases of secondary hemorrhage. It has several times been successful when the ligature of one of the main vessels of a limb in continuity or even amputation seemed to be called for. The turpentine should not be applied until the area to be treated has been thoroughly freed of blood clot and debris, and though it is not always necessary to use an anesthetic for this purpose, it is usually wiser to do so.

When one is dealing with areas in which there are large vessels an attempt must always be made to secure both ends of the vessel in the wound according to the well-established rules for the treatment of secondary hemorrhage, but turpentine is especially valuable in those cases in which no bleeding point can be caught, but in which the hemorrhage is nevertheless alarming.—Medical Record.

TUBERCULOSIS ALMOST A UNIVERSAL INFECTION:—Recent investigations tend to confirm the conclusions long since enunciated by a German physician that "in the end everybody has a touch of tuberculosis." At all events, Nageli, in 1900 found that 97 per cent of adults examined at autopsy in Zurich showed active, latent, or healed tuberculosis, the animal in many instances being able to combat the bacillary invasion. This, of course, in the language of Prof. Welch, is "not equivalent to saying that everyone has or has had the disease tuberculosis. It signifies merely that in the class of people examined practically everyone had received into the body tubercle bacilli and that these had left their record behind."

From what has been said it is evident that tubercle bacilli are widely scattered. The modes of invasion are also numerous, and yet there is a certain proportion of those exposed who do not develop the disease. This shows, as already mentioned, that in addition to the germs there must be a suitable soil for the growth and destruction effects. Such a soil is usually found in persons of feeble physique, victims of malnutrition, whose bodies have been weakened by one or more of the numerous causes, whether it be a dissipation, insanitary homes, impure air, or lack of cleanliness, sunlight, outdoor exercise, or proper food.

Clinical experience indicates that faulty nutrition, debility, loss of blood, anemia, mental anxiety, diabetes, whooping cough, measles, and other diseases favor the development of tuberculosis. We also know that a predisposition may be inherited, as evidenced by a delicate physique, narrow chest, and general vulnerability of the tissues. Predisposition to tuberculosis may also be acquired through dust-producing occupations, and here the amount of dust is less important than the character of the particles which compose it.—Public Health Reports.

THE NEW ANTISEPTIC:—Recently the newspapers have contained announcements of a new antiseptic or germicide that has proved, or is to prove, of great value in the treatment of the wounded in the present war. Credit for its discovery is given to Drs. Carrel and Dakin.

The antiseptic referred to is that which Dr. Dakin, of the Herter Laboratory, New York—now serving as bacteriologist in a war hospital at Compiegne in France—announced in a paper read before the Academie des Sciences in Paris. It is made by the well-known process of adding sodium carbonate to a solution of chlorinated lime. The mixture is thoroughly shaken, and after half an hour the liquid is siphoned off from the precipitate of calcium carbonate and filtered through cotton. To this clear liquid, sufficient boric acid is added to make the preparation neutral or acid, the amount required being determined by tritration with phenolphthalein. Such a solution was found to kill pus germs in two hours.

According to the *British Medical Journal*, about a year ago Professor Cohen, of the University of Leeds, England, entered into communication with Dr. Dakin, a former student, regarding research on antiseptics for surgical use. The arrangement was that the substances elaborated by Professor Cohen should be tested bacteriologically by Dr. Dakin, and that the most promising should be tried clinically by Dr. Carrel.

At about the same time, under the auspices of an English medical research committee, a similar research by

Prof. Lorrain Smith, with the assistance of Professor Drennan, of the University of Otago, N. Z., Dr. Rettie, a chemical expert, and Lieutenant W. Campbell, of the British army medical corps, was undertaken in the University of Edinburgh. Their results were reported in the *British Medical Journal*. The substance which they prepared was made by rubbing up chlorinated lime to a fine powder and mixing it with an equal weight of powdered boric acid. The ideal antiseptic for the field, they concluded, was a dry powder to be applied direct, which, it was believed, has advantage over a solution because it is more portable, and water is often not procurable.

Chlorinated lime, the basis of the so-called new antiseptic preparation, is well known as a powerful disinfectant. It is destructive to living tissues except in dilute solution. The same may be said of solution of chlorinated potash (Javelle water), which has been largely used by French surgeons in the present war, and of solution of chlorinated soda (Labarraque's solution). The advantage claimed for the new mixture is that the preparation, being practically neutral and unirritating to the tissues, may be applied in greater strength than that in which it is possible to use chlorinated lime, Javelle water or Labarraque's solution. Experiments indicate also that the germicidal activity of chlorinated lime is increasing by such treatment of the calcium hypochlorite as has been described. Such increase in germicidal activity is generally attributed to the liberation of hypochlorous acid. It has been found that the activity of ordinary bleaching powder is greatly increased by passing through it carbonic acid gas. Any other acid. as boric acid, will do as well. From the chemical point of view, therefore, says The Journal of the American Medical Association, there is nothing new in this method. the practical application of such a mixture is not wholly new is proved by an earlier article published by Vincent in 1914. He suggested the application to ulcerating and gangrenous wounds of a mixture of chlorinated lime and boric acid.—Cal. State Journal of Medicine.

An Interesting Obstetrical Case:—Mrs. M. M., aged 24 years, engaged me to attend her in her first confinement almost three and one-half years ago. After the usual antepartum examination, I informed her that everything was normal and that, barring any unforeseen complication, she should have a normal delivery at full term. She was later influenced to change her plans and entered one of our large hospitals to be confined there by one of its attending obstetricians. After she had been in labor but a few hours, the obstetrician told her that she was suffering from a deformed pelvis and could never deliver her baby and that a cesarean section would have to be performed. The operation was successfully performed and a 6½-pound living boy was born, the mother making an uneventful recovery.

Patient again became pregnant and on consulting her former attending obstetrician was told that a cesarean section would again have to be done. During the course of her pregnancy, she also consulted me and, in her conversation, recalled to my mind what I had told her during her first pregnancy and said if I could assure her of a normal delivery at the termination of this pregnancy, she desired me to attend her in her second confinement. After the usual antepartum examination, I again informed her that, barring any unforeseen complication, she should have a normal de-On Friday, Aug. 13, 1915, after an actual labor lasting about twelve hours, she gave birth to a living boy, weighing 7½ pounds. In this connection, it is also interesting to mention the fact that 1 c.c. pituitrin was given intramuscularly to hasten delivery during a tedious perineal stage.

This case is reported to show, firstly, how as a result of a grossly inaccurate diagnosis a patient was subjected to the risks of a major surgical operation; secondly, the possibility

of a normal delivery following a cesarean section, and thirdly, the comparative safety in the use of pituitrin in properly indicated conditions even in a previously wounded uterus.—Isidor Eckert, M.D., in N. Y. Med. Record.

INTESTINAL TROUBLES IN INFANTS:—Copper arsenite is probably the best intestinal antiseptic for the bowel troubles of children, associated with nausea and vomiting, preventing the use of ordinary medicaments. The copper arsenite can be given in minute doses (1-100 grain or less), in solution, and at short intervals.

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IODINE AND CINCHONA POWDER A SUBSTITUTE FOR IODO-FORM:—Mouchet and Malbec (Paris Medical, January 30, 1915), recommended a combination of iodine and powdered cinchona as an odorless substitute for iodoform. The iodine and cinchona powder possess an agreeable odor, while it is antiseptic and exercises a beneficial effect on wounds, overcoming infection and odor and promoting granulation.

SERVIA DECORATES AMERICAN DOCTORS:—Crown Prince Alexander has decorated forty-three American physicians and sanitary engineers in recognition of their services in stopping the epidemics which broke out in Servia after the war began. The Americans decorated are representatives of the Rockefeller Foundation and the American Red Cross.

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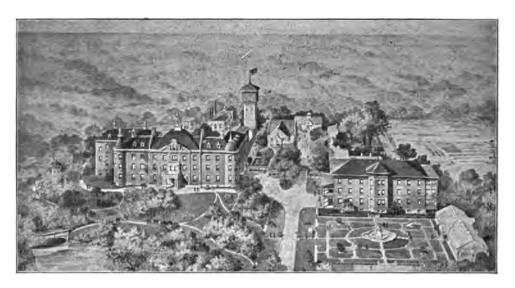
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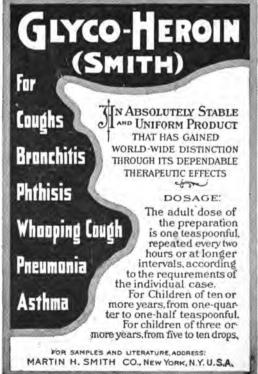
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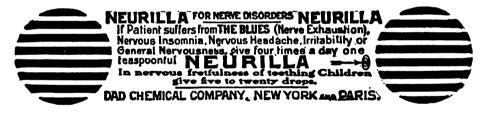
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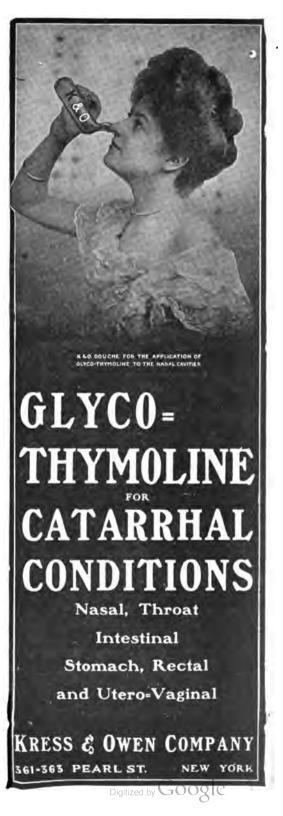
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Send us the name of your dealer, that you asked to show you a Laughlin Non-leakable Self-filling Fountain Pen, and we will send you free of charge one of our new Safety Pocket Fountain Pen Holders.

It is not required that you purchase a pen to get this Safety Holder, we simply want the names of dealers who do not handle this pen, that we may mail them our catalogue. Address

### Laughlin Mfg. Co.

262 Wayne Street
Detroit, Michigan



# Special

# INFANT FEEDING

# Malnutrition-Marasmus-Atrophy

MELLIN'S FOOD
4 level tablespoonfuls
SKIMMED MILK
8 fluidounces
WATER
8 fluidounces
Water
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100.00

The principal carbohydrate in Mellin's Food is maltose, which seems to be particularly well adapted in the feeding of poorly nourished infants. Marked benefit may be expected by beginning with the above formula and gradually increasing the Mellin's Food until a gain in weight is observed. Relatively large amounts of Mellin's Food may be given, as maltose is immediately available nutrition. The limit of assimilation for maltose is much higher than other sugars, and the reason for increasing this energy-giving carbohydrate is the minimum amount of fat in the diet made necessary from the well-known inability of marasmic infants to digest enough fat to satisfy their nutritive needs.

MELLIN'S FOOD COMPANY,

BOSTON, MASS.

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In many cases of coryza, cystogen in full doses (gr. X-XV, 4 times daily for an adult) acts promptly and effectively if treatment is given at the inception of the attack. The irritation is relieved, the watery secretion is checked, and the "stuffiness" and headache disappear.

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Cystogen-Aperient FORMULA (Cystogen gr. V. Sod. Phos. gr. XXX. (Granular Effervescent Salt)

DOSE: One to three teaspoonfuls in a glass of water t. i. d.

is suggested as especially convenient since a laxative is usually indicated and seldom inadvisable in these cases.

### CYSTOGEN PREPARATIONS.

Cystogen—Crystalline Powder.
Cystogen—E-grain Tablets.
Cystogen-Lithia (Effervescent Tablets.)
Cystogen-Aperient (Granular Effervescent Sait with Sodium Phosphate.)
Cystogen-Quinine.

Cystogen Chemical Company
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"The Perfect Surgical Lubricant" PAT. OFF.



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### ADVANTAGES.

- 1. Course of the disease shortened.
- 2. Number and severity of the paroxysms decreased.
- 3. Vomiting prevented or rendered less frequent.
- 4. Sequelæ diminished.

### PERTUSSIS VACCINE.

### INDICATIONS.

In cases diagnosed as pertussis (whooping-cough), or in suspected cases when a definite diagnosis is lacking; also as a prophylactic.

### HOW SUPPLIED.

Bio. 203. In cases of four I-mil (Cc.) bulbs with-out injecting attachment, 100,000,000 bac-teria per mil (Cc.). Package of four, \$1.00.

Bio, 204. In 1-mil (Cc.) glass syringes, 100,-000,000 bacteria per mil (Cc.). Package of one, \$0.50.

Bio. 205. In cases of four I-mil (Cc.) glass syringes, 100,000,000 bacteria per mil (Cc.). Package of four, \$2.00.

Bio. 207. In 5-mil (Cc.) rubber-capped viale, 100,000,000 bacteria per mil (Cc.). Pack-age of one, \$1.00.

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### PERTUSSIS VACCINE, COMBINED.

### INDICATIONS.

All cases of pertussis, but especially those which have persisted for some time—such infections being almost invariably of the mixed type.

### HOW SUPPLIED.

Bio. 234. In cases of four I-mil(Cc.) bulbs without injecting attachment, 120,000,000 bacteria per mil (Cc.). Package of four, \$1.00.
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Bio. 236. In cases of four I-mil (Cc). glass syringes, 120,000,000 bacteria per mil (Cc.). Package of four, \$2.00.

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Administered subcutaneously with an ordinary hypodermatic syringe or directly from syringe containers.

Before being offered to the medical profession our Pertussis Vaccines were thoroughly tested clinically. In the opinion of many competent observers they afford the best known treatment for pertussis.

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